THE VETERINARY RECORD

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Edited by WILLIAM HUNTING, F.R.C.V.S.

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A "SAD CASE."

Misunderstandings arise all too easily in this world between the best of people, and a sentence or a word used most innocently may be interpreted by others in a way never intended by the user.

When the Rector of Roscommon sent us his first letter we confess to some hesitation in publishing it, but the mention of Mr. Byrne's name led us to conclude that the Rector and that gentleman had discussed the matter.

When Mr. Byrne wrote the following week it was clear that a misunderstanding had occurred, and now that Mrs. Leaney and the Rector offer further explanations we are able to form some definite opinion of the case.

The Rector does not know Mr. Byrne. Mr. and Mrs. Leaney speak of Mr. Byrne as "most kind" and all of us who know that practitioner require no evidence to strengthen our conviction that he is the last man to do anything unkind—in fact, we all know him to be the soul of honour, and even quixotic in his generosity. The first mistake is in the use of the word "accident" which suggests employer's liability. The fact is Mr. Leaney was the victim of a stroke of paralysis. No private house could afford proper attention to such a case, and the patient was removed to the Infirmary, where all his wants are attended to. The first letter asked for "a little to enable him to be removed," but Mrs. Leaney now corrects that by desiring sufficient to maintain the patient at a convalescent home—quite a different matter. The first request probably suggested to Mr. Byrne that his fellow practitioners might think him capable of refusing that slight aid, and unfortunately the words might be so construed. Then the statement of fact that "he has not been in receipt of any salary for over eleven weeks" might suggest that some was due, so we were not surprised at Mr. Byrne expressing "surprise and regret" at the Rector's letter. The Rector's letter this week does not quite assist in clearing matters up—its tone is controversial—but it shows that his action was directed only by the best intentions, and we may safely leave him to arrange peace with his fellow townsman.

If we allow misunderstandings to divert our attention from the patient no good will be attained. Mr. Leaney and his family are our chief concern. In the present position of matters the patient requires nothing for his comfort except the hope that assistance will not be wanting when necessary. The veterinary profession has two benevolent institutions which the Rector of Roscommon does not know of. Our members are few and not affluent but an appeal to them in favour of an unfortunate member is never lost. We all know Mr. Byrne's goodness of heart, and we are willing to credit the Rector with all good feelings, but we hope that no check will be laid on the actions of members by any differences resulting from misunderstanding.

We have received two letters from others on this matter, but believe it to be expedient not to permit any outside controversy.

THE STAINING OF RIVOLTA'S CRYPTOCOCCUS.

So far as one is able to judge from the observations of various writers, it appears to be a pretty widely held view that the causal organism of epizootic lymphangitis is very resistant to any stain. Capt. H. A. Sullivan, A.V.D., in an article published in *The Veterinary Record* for March 4, 1905, states that it requires an exposure of 1½ hours to aniline gentian violet before the cryptococcus will take the stain. As a matter of fact an exposure of *5 minutes* is quite sufficient with this dye to give a perfect stain if the method about to be described be adopted. About January, 1904, Mr. T, Bowhill, F.R.C.V.S., published an article in *The Veterinary Record* in which he points out that the cryptococcus stains by the method of Claudius, the stain used being methyl violet (Gentian violet has been found to answer just as well). Since then that has been the method invariably adopted, and with uniform success, by the members of the practical bacteriology classes here. The whole process is a very simple one. All that is necessary to observe is to have the film of pus thinly and evenly spread in order to render the process of decolourisation as short as possible, and also not to carry decolourisation too far. This can be easily controlled by examining the film occasionally under a low power of the microscope.

The process is as follows. Fix the film by heat; stain for five minutes with one per cent solution of aniline-water gentian violet, or carbol gentian violet. Wash in water, dry with blotting-paper. Then treat the film with a half-saturated watery solution of picric acid for two minutes, wash again in water, dry with blotting paper, then decolourise by adding successive quantities of clove oil—two or three changes usually suffice. Pour off the oil, dry, and mount in Canada balsam, or examine unmounted.

By this method the cryptococci are stained reddish violet whilst the groundwork is stained yellow. So far as I am aware, all organisms staining by Gram's method also stain by Claudius'.

In reality, to anyone familiar with the morphology of the cryptococcus, staining is unnecessary for all ordinary purposes of diagnosis, as it is readily distinguishable in thin smears of pus when examined under a high power, either mounted wet or in the dry state.

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A CALCULUS IN THE SMALL INTESTINE.

By W. Barling, M.R.C.V.S.

A well known Shire stallion "Blaisdon Conqueror" showed colicky pains on a Friday morning and was given a colic draught at once. The sedative drink was repeated an hour or two later, and my attention drawn to the case.

I found the horse in continuous, acute pain, breathing thoracic, pulse depressed and 80 per minute, temperature 102°F.

Chlorodine and Cannabis Indica were administered, hot-water rugs were applied to the abdomen and constantly changed. At 8 p.m. there was no improvement, pain continuous, and facial expression becoming drawn and anxious. Gave 8 grs. morphia and atropine hypodermically, and left chloral to be given during night if necessary.

Next day pain still troublesome, temperature 104°, pulse 90 to 95, and almost inperceptible. Sedatives were repeated, warm fomentations continued, but death took place about 9.30 p.m. Throughout the whole duration of the case there was no flatulency or distension of the abdomen. One symptom presented was frequent sitting upon the haunches, but this I do not look upon as diagnostic of any special lesion—merely a position which gives some relief to abdominal pain.

Post-mortem examination showed the stomach distended with fluid and gas. The small intestine was inflamed, and in it was a calculus weighing 1lb. 7 ounces.

The existence of a calculus in the small intestine is so rare an occurrence that I think the case worthy of record. It is difficult to imagine the obstruction to have formed there, and it is almost more difficult to think it could have moved forward from the large intestine. A portion of the jejunum was bulged and thin, where no doubt the calculus had rested for some time, as it was found some three or four inches posterior to this, and about two feet from the stomach.

DELIVERY OF A SCHISTOSOMA REFLEXUM

We were summoned to attend a cow that could not calve early one morning last week, the message was, that they did not know what was wrong, but afraid the cow's bowels were hanging out.

On arrival we found the bowels and liver of the calf presented, the bowels hung down as far as the cow's hocks; she had been in labour for about eight hours, and was a big, fat, roomy cow, which no doubt made the delivery all the more easily accomplished.

After removing the viscera we felt inside; the first leg we got was the off fore, but as the knee was bent in the opposite direction to the normal position it could not be got into the passage. Then we pushed the fœtus well into the uterus and managed to get the head, which lay farthest from us, it being secured with a rope round the neck; we roped both fore legs, also the hind leg which lay along the calf's head, and delivered it in that position.

We are enclosing a photo. The spine is curved right round, the tail lies at the back of the calf's neck. The near fore leg is the only one that is not deformed. The cow has done well. This is the second case of the kind we have seen, and we think it might be of interest to others.

P. McKinlay, M.R.C.V.S.

Stranraer.

POSSIBILITIES OF HYBRIDISING.

Enclosed are three photos depicting a most remarkable case of hybridisation in the second generation and presenting to us an altogether unique case from the scientific point of view. The snapshots were taken at the Ghezereh Agricultural Show, Cairo, and forwarded to a gentleman in this neighbourhood (a M.F.H.) to whom I am indebted for the information, by a friend of his in the Agricultural Section of the Department of Technical Education, Egypt. The dam is a Spanish mare, sire an Egyptian *mule*, while the twins are respectively a horse and a mule.

The fact of bringing forth at a birth two foals of a different species is a very peculiar occurrence, even if the sire had been a donkey, but when we take into consideration the fact that the father was a hybrid, which learned men tell us will not breed, owing to unequal division of the chromosomes in the karyo-kinesis of the nucleus in the embryonic cell, the case constitutes something of a marvel.

John Forbes, M.R.C.V.S.

Truro.

ABSTRACTS FROM FOREIGN JOURNALS.

Anatomical Notices.—By Prof. Dr. Schmaltz.

I.—Neurotomy at the Nervus Peronæus.

State Veterinary Surgeon Dr. Topper has had favourable opportunities of treating spavin by section of the nerv. peronæus as up to the present performed. He recently told me that this operation had its shady side, and questioned whether the nerve could not be better exposed and operated on at a higher situation. This is the case, and hence it may be useful to the practitioner to follow out the course of the nerve in a dissection or diagram, and to consider the alternative. The outside of fibula and stifle joint are covered in the horse by the the biceps muscle which radiates with three fleshy fibres to the patella, to the tibial tuberosity, and in the fascia cruris which blends with the tendo-Achilles. Under the fleshy edge of the biceps the peronæus nerve issues, and here its stem is easy to find. It is covered here by the fascia cruris divided into two layers, superficialis and profunda. The deep stronger layer is the aponeurosis of the biceps and the direction of its chief strands is to the corresponding muscle.

The superficial layer supported by the fasciæ of the biceps shows a different direction of its fibres. For practical ends the bent position of the stifle is best.

The nervus peronæus lies (making its exit under the fleshy wall of the biceps) on the stretched extensor digitalis lateralis muscle, then it slants and crosses over to the fibula a finger breadth under the ligament. On this firm under layer ft is easy to find, and here it divides quite constantly into four branches.

At first either together or quite near one another the muscular branch for the extensor digitalis lateralis and the long superficial branch to the foot divide away. They lie on the middle of the fleshy bodies of the extensor lateralis, the superficial branch to the foot runs along this muscle and then crosses superficially over the bent surface of the hock to the metatarsus. After giving off these two branches, the nervus peronæus passes abruptly to the furrow between the lateral and common extensor of the phalanges, and divides immediately before it reaches it into two branches. The one, the upper runs obliquely in the muscular furrow and supplies the extensor digitalis communis and the tibialis anterior. The other is the deep foot branch of the peronæus, the object of search. This bends downwards and disappears also in the furrow between both extensor ligaments and runs down accompanied by the vena tibialis anterior. Above the upper annular ligament it sinks internally under the bent surface of the hock joint, and giving out two branches to the same comes, at the lower half of the tarsus, under the extensor tendon of the phalanges to appear again on the metatarsus.

If one makes a section of the deep phalangeal branch of the peronæus between both extensors, one has to draw these away from one another, as they cover the nerve which is accompanied by a large vein.

This has surgical disadvantages, and the fascia cruris parallel of the muscular furrow often has to be cut through. On this account it is better to operate nearer the stifle joint immediately under the slope of the nerve before it disappears in the furrow between the extensors. The nerve is undoubtedly easiest found here, and is to be seen immediately after cutting through the fascia. The sloping nerve trunk presents itself on the firm underlayer of the lateral extensors. An error as to the branches is impossible. In the middle of the lateral extensor a branch is given off which is the only important superficial one (the little branch arises near it in every case whether visible or not.)

The point of incision to find the nerve is surficial oblique to the axis of the leg (the stifle joint being bent almost at right angles). It will thus be parallel to the nerve trunks and be in the same direction as the fibres of the biceps muscle and of the deep strong layer of the fascia cruris (known as the aponeurosis of the biceps). The muscle stretch will not pull the edges of the incision in the fascia from one another, but draw them together. The nerve appears immediately after cutting through skin and fascia glimmering through the deep layer of the same; no vessels lie in its neighbourhood here.

If one goes down the bent stifle from the patella on the anterior surface of the stifle the tibial tuberosity is encountered. This bony protuberance has a certain length, and one can feel here its upper and lower end. If one feels from its under end right across the stifle obliquely, in its hollow, one comes across a little higher and towards the patella a ridge under the skin—the ligaments to the fibula. A finger's breadth under this ridge (towards the foot) lies the nervus peronæus, and here it is cut through.

Since the branches of the peronæus turn aside towards the foot the incision had better be some millimetres above than below in the nerve trunk. A finger's-breadth under the ridge answers the purpose in every case.—Ex. *Berliner Thierärzt. Woch.*

G. M.

On the Etiology of Contagious Pleuro-Pneumonia and Analogous Diseases of the Horse. —By M. Tartakowsky, St. Petersburgh.—(Abstract from a paper read at the Congress of Russian Veterinary Surgeons in January, 1904).

The question of the etiology of *pleuro-pneumonia* and of influenza of the horse, so rigorously discussed, became clearer since the publication of Lignières' labours in 1887, and (whose brilliant researches, says the author, seem to be a continuation and an extension of those of Babes and Starcovici), thanks to his complete knowledge of the bacteriology of the hæmorrhagic septicæmias, studied by him in the various anomats has contributed to efface the confusion.

He explains that, for pleuro-pneumonia and influenza, the principal *rôle* falls to the ovoid bacillus or cocco-bacillus of the group of hæmorrhagic septicæmias. It manifests the characters of its group and therefore it dispenses with giving the details of its dimensions, morphology, and virulence. The chief trait of Lignières' bacteria is that they are scarce or absent in the dead animal; this explains why Schütz did not encounter them. The cocco-bacillus does not secrete less toxins which put the organism into a state of receptivity for other microbes and notably the streptococcus of strangles. The diplo-coccus of pneumonia of Schütz, is not the agent of contagious pneumonia but only of a concomitant affection, as Hell had already demonstrated. Comparing the affections with those contained in Hueppe's hæmorrhagic septicæmia Lignières proposed to denominate them "Equine Pasteurellosis." The researches of Lignières have been scarcely followed; German literature is dumb on the subject; in France, Cadéac has thrown doubt upon the specificity of the cocco-bacillus; and, in Italy, Brusasco and Boschetti contest the conclusions of Lignières. Piano and Gallio-Valerio believe the pathogenic influence belongs to a bacillus of the *bacillus coli communis* group.

The results of the author's researches concerning the etiology of pleuro-pneumonia have led him to formulate the following fundamental rules:

1. The *contagious pleuro-pneumonia* of the horse is a specific malady of the group of hæmorrhagic

septicæmias. It absolutely corresponds to swine plague and more still to the septicæmia of the rabbit. In its most typical forms it is manifested under the aspect of pneumonia, pleuro-pneumonia, and simple pleuritis or complicated with pericarditis or simply with the character of *septicæmia.*

2. Hæmorrhagic septicæmia of the horse, but very rarely, in some isolated cases as during the course of epizootics, is complicated by secondary strangles infection. The indications of Babes and Starcovici, and Lignières upon these mixed infections are fully confirmed by the author's researches.

3. Schütz's study of pneumonia of the horse, which would seem to have received a direct confirmation from the researches of Lignières should be considered as an error.

4. Alongside of the contagious pleuro-pneumonia caused by the *cocco-bacillus* of hæmorrhagic septicæmia, isolated diseases and entire epizootics, the characters of which resemble those of the first infection, exist. Some take on the form of the pharnygo-laryngitis of Dieckerhoff and others arise from infection due to the streptococcus of strangles without participation of the cocco-bacillus of hæmorrhagic septicæmia.

5. Inoculation of mice with pure cultures of strangles streptococcus on the nasal mucus membrane and in the mouth may give rise either to typical strangles, or pneumonia and pleuro-pneumonia with general infection absolutely similar to that which is observed in the epizoötics of pleuro-pneumonia associated with streptococci in the horse.

6. From this fact infection by the nostril in mice may be recommended for the distinction of the strangles streptococcus.

7. Equine strangles may present itself not as a benign disease, but as an epizoötic difficult to combat. It may make itself noticeable by the great diversity of the localisations of the processus—streptococcic infections. It does not confer immunity. It shows varied extraordinary complications manifesting themselves sometimes after several months and even often following a mild attack." Affections of the joints and tendinous sheaths, iritis, iridochoroiditis, recalling to mind specific ophthalmia and cerebral abscess." During the course of some epizoötics the strangles streptococcus shows a surprising virulence. It may even produce serious affections and even death by reinforcement in the dependencies of the air passages.

8. An extensive use of sero-therapy may contribute to check strangles and its consequences, as well as prevent up to a certain point the recrudescence of epizoötics.

9. The single resource in the struggle against pleuro-pneumonia of the group of hæmorrhagic septicæmias may be in the application of a *specific* inoculation, prophylactic and curative, probably by the combined injections of cultures and serum.

10. In serious pleuro-pneumonic affections, the serum should be injected not under the skin, but into the pleuræ, trachea, or veins.

11. In the case of hæmorrhagic septicæmia complicatlng strangles, it might be necessary to use a *bivalent serum.*

12. The author criticises the denomination of *pasteurelloses*, proposed by Lignières, and which seems to him to be dictated by a chauvinistic sentiment. He would adhere to the appellation of *hæmorrhagic septicæmia* adopted by Hüppe in 1886 for this group of maladies. He has given several reasons to support this statements but it would be superfluous to reproduce them.

13. The etiological unity of influenza and contagious pleuro-pneumonia of the horse, established since 1889 by Babes and Starcovici, Calinescu, and during the last few years by the persevering work of Lignierès, is in all probability, if one admits the analogy of the different forms of disease produced by the cocco-bacillus in other species, viz., poultry, swine, rabbit, oxen, dog, and cat.

14. The French denomination of typhus or typhoid does not rest on any theoretical or practical basis.

15. Until more complete enlightenment, it is necessary to adopt the distinction proposed by Dieckerhoff and adopted now in the Russian Army and to distinguish :

(*a*) Influenza having a distinctive character of a mild humoral malady with disturbance of the nervous system, eye, tendinous sheaths, and intestine.

(*b*) Contagious pleuro-pneumonia (Chest epizoötic thoracic form of influenza, or Brustseuche of Diechierhoff.)

Concerning the *streptococcic infection*, it would be necessary to show the relationship to strangles by adding to the word strangles "*with complication.*"

16. *Petechial fever* (purpura hæmorrhagica) does not exist in the horse as an independent disease, it is a complication.

17. To strangles should be relegated a special form of *pustular stomatitis* observed by the author.

H. G.

TRANSMISSION OF GLANDERS BY A RE-ACTING BUT APPARENTLY HEALTHY HORSE; RE-INFECTION OF TWO HORSES WHICH HAD CEASED TO REACT TO MALLEIN.—By M. A. CONTE, Chief of the Sanitary Service of the Département of Hérault.

Article 46 of the decree of 22 June, 1882, enacts that animals exposed to contagion "which have presented symptoms of the disease shall be under inspection of the veterinary authority for a year." The ministerial circular of September 15th, 1904, codifies the sanitary measures applicable to horses suspected, by cohabitation, which have reacted to the mallein test. Those which present no clinical symptom are subject (Art. 46) to inspection for a year "with permission to the owner to use them under certain restrictions" indicated by the consultative committee on epizootics in an Instruction for the use of mallein in doubtful cases, which states:—

"Animals which show the ordinary reaction (hyperthermie, œdema, prostration, etc.) are declared *suspects*; they must be rigourously isolated from the others, marked and kept under the supervision of the veterinary authority for a year . . . . injection with mallein will be repeated every two

months. . . . They will remain under surveillance until they shall have submitted to two successive injections without reacting; they may be used so long as they show no symptom which may be considered dangerous, but only on conditions that they shall not be watered at the common troughs nor allowed to enter any other stable than their own."

Theoretically perfect, this *régime* does not always give the expected results. In many cases on account of insufficient stable room horses are placed in a corner isolated only by bales from those which mallein has declared free from the disease. At first they are groomed with their special tools, fed and watered from vessels kept specially for their use and disinfected each time after use. Later these precautions are neglected. The owner, misled by the apparently healthy state of the animals, believes neither in the existence of danger nor in the indications of mallein, and considers the restrictions vexatious and useless. If the fear of the correctional tribunal prevents him placing the "reacters" in others stables or allowing them to drink from the common troughs, or using them under other conditions than those stipulated in the prefectoral "Order," he willingly neglects to take the measures demanded by common prudence in his own interest. In many cases this blind obstinacy has been followed by the onset of glanders in animals previously passed by the mallein test. Amongst others the following is worth noting for the lesson it teaches.

Glanders was found in a stable, and after the slaughter of several animals there remained five horses showing no clinical symptoms. Two of these passed the test with mallein, the other three were declared suspects. The two, isolated in a corner of the stable and afterwards removed to another, never reacted; those which reacted, used in a public service and working the same vehicle, lived in common and fed from the same manger.

The second testing, two months after, resulted in complete reaction in one of the three (hyperthermie, œdema, prostration, etc.), slight reaction only in the second, and none in the third. Contrary to the advice given him, the owner would not isolate these three separately. Forty-two days after the second injection the animal which had not reacted had nasal glanders. Autopsy showed recent sub-acute lesions in the pituitary membrane and the lungs, and an absence, in spite of the most careful searching, of old lesions.

At the third testing, the first reacter again reacted, his stable companion did not. Thirty-four days after the latter showed clinical symptoms and was slaughtered. Lesions, exclusively recent, existed in the nasal membrane and in the lungs.

The "reacter" remained under surveillance for four months longer, received injections each two months and reacted each time. Yielding at last to our solicitations the owner consented to slaughter. Autopsy showed old standing lesions of chronic glanders, with exceptional acerbations corresponding with the dates of destruction of the other animals. All the organs were free except the lungs, which were studded with hard, circumscribed nodules from the size of a pea to that of a walnut, consisting of a thick wall intimately connected with the pulmonary tissue, enclosing a caseous centre infiltrated with calcareous cells and of a yellowish white colour. The hypertrophied bronchial glands, hard and knotty, presented on section agglomerated tubercules which had undergone caseation.

This observation is interesting on several grounds. It shows in the first place the danger of reacting horses which are healthy in appearance. The two horses unaffected by the test were reinfected by their stable companion which was clinically free but which showed full reaction after each testing. This result entirely justifies the prudential measures recommended by Nocard from his earliest researches on the prophylaxis of glanders; it allows us to accept only with the greatest reservation the finding of the English Commission which was charged with the study of the transmission of glanders and the curative power of mallein, that "in *ordinary conditions*" the danger from horses healthy in appearance which react to mallein is so slight that it may be neglected.

The observation carries another lesson. It furnishes a fresh demonstration of the fact already known that a first attack of glanders does not confer immunity, nor does it increase the resistance of the dog (Galtier), or of the horse (Nocard). The two companions of this glandered horse gave on the first test a complete reaction, upon the second and third test they respectively ceased to react. This result appears to follow the lines of an experience reported in *Les Maladies Microbienne* (3rd ed., 1903, p. 235). "Nocard gave by ingestion a virulent culture to three horses from a badly infected stud which had several times given a complete reaction and then ceased to react. These three contracted the disease afresh as easily as the control."

Out of 16 reactors, apparently healthy, that we have been able to trace, three became glandered during the period of supervision, and 13 have shown no further symptoms. Cessation of reaction generally occurs after the third or fourth test, that is in from four to six months. From a sanitary and economic point of view, the regulations should prescribe the slaughter of all horses clinically free which have reacted to four successive tests at intervals of two months.—*Rev. Gén. de Méd. Vét.*

W. H. B.

MIDLAND COUNTIES VETERINARY MEDICAL ASSOCIATION.

The annual meeting was held at the Grand Hotel, Birmingham, on Friday afternoon, Feb. 10. The President (Mr. T. A. Huband, of Cheltenham) occupied the chair; and there were also present: Messrs. W. Hunting, F. W. Wragg, London; A. W. Mason, Leeds; A. Hodgkins, Hanley; J. A. Gold, Redditch; W. Carless, Stafford; F. J. Taylor, J. Malcolm, J. Blakeway, W. H. Brooke, J. Young, C. J. Byner, Birmingham; J. W. Coe, Stoke-on-Trent; F. L. Gooch, Stamford; L. W. Heelis, Solihull; T. Slipper, Tamworth; H. Collett, West Bromwich; W. S. Carless, Worcester; T. J. Brain, Cheltenham; F. W. Barling, Ross; J. J. Burchnall, Loughboro'; G. Wartnaby, Burton-on-Trent; H. L. Pemberton,

Bridgnorth; T. Chambers, Dudley; G. Prickett, Walsall; W. Grasby, Daventry; and the Hon. Sec. (Mr. H. J. Dawes, of West Bromwich). There was also present as a visitor Mr. D. R. Chalmers, Birmingham.

Apologies for unavoidable absence were received, either by letter or telegram, from: Profs. M'Fadyean, Dewar, and Pritchard; Messrs. R. C. Trigger, Marriott, Reynolds, Hughes, Cockburn, Potter-Carter, Wheatley, Over, Pritchard, Beddard, Fairer, Thackeray, Jermyn, Barrett, Marriott, A. Green, L. Green, Burndred, Tipper, Spencer, Packman, Carless (Hereford), Barber, Allen, and others.

Elections and Nominations.

The following gentlemen were elected members of the Association:

Mr. E. R. Holme Woodcock, of Eccleshall, proposed by Mr. W. Carless, and seconded by Mr. W. S. Carless.

Mr. J. G. Parr, of Leicester, proposed by the Hon. Sec., and seconded by Mr. Burchnall.

Mr. Taylor nominated for membership, Mr. D. Reid Chalmers, of Birmingham. Mr. Chalmers' name will be put to the vote at the next meeting.

Financial Report: Serious Illness of Mr. T. J. Merrick.

The Hon. Sec. said it was his painful duty to announce that he had received a letter from Miss Merrick stating that her father was seriously ill. He had a severe stroke of paralysis on January 3rd, and had been lying partially unconscious ever since. He (the speaker) went specially to Northampton and prepared a balance-sheet himself from Mr. Merrick's papers and books. That had since been duly audited, and he now submitted it.

Receipts.

	£	s.	d.
To Cash in hand, Jan. 1st, 1904	124	12	6
Subscriptions and Entrance Fees	54	11	0
Bank Interest (less charges)	2	2	11
	£181	6	5

Expenditure.

	£	s.	d.
By Victoria Vety. Benevolent Fund	5	5	0
Sanitary Institute	1	1	0
Institute of Public Health	1	1	0
Expenses of Delegate to San. Congress	5	5	0
" " P. H. "	5	5	0
Secretary's Account	18	16	3
Treasurer's "		14	6
Balance in Bank, December 31, 1904	143	18	8
	£181	6	5

He thought the amount in hand would give the members satisfaction. (Hear, hear.) There was one matter which Mr. Merrick intended to have brought forward, had he been able to be present, and that was with regard to members who were in arrear. In one or two cases he got no answer whatever to his application for their subscriptions which were three or four years old.

Mr. Gooch moved that the rule empowering the Treasurer to strike off the list of members the names of those who were more than three years in arrear be enforced. He suggested, however, that they should be written to once more and allowed a week in which to pay up.

This was seconded by Mr. Wartnaby and carried unanimously.

On the motion of Mr. Gooch, seconded by Mr. Gibbings, the balance-sheet was adopted.

Mr. Gibbings suggested that instead of hoarding up a balance, they should increase their subscription to the National Veterinary Benevolent Fund.

The President said that had been discussed at a recent meeting, and it was decided that there should be no immediate increase in the subscription, but that whenever the Association thought fit they would make a special donation.

Mr. Grasby then moved that a letter of condolence be sent to Mr. Merrick, with an assurance of their high esteem and regard for him. Mr. Merrick had worked hard for the profession, and until he was suddenly stricken with his present illness he was an exceedingly active man. There was no more popular member of the Association, and his services as Treasurer had been invaluable. (Hear, hear.)

The Hon. Sec. said he should like to second that motion. He regretted to state that under the most favourable conditions it would be months before he would be able to leave his bed.

After a few sympathetic words from the President, the resolution was carried unanimously.

Election of Officers.

On the motion of Mr. Blakeway, seconded by Mr. W. Carless, Mr. W. Hunting was unanimously elected President for the ensuing year.

Mr. Hunting said he had some diffidence in accepting the honour, greatly as he appreciated it, because as the National were visiting Buxton this year as the guests of the Midland, it might appear anomalous that the Secretary of the Society whose members were invited guests, should also be the President of the Society that was providing the hospitality. However, as it was the unanimous wish of the meeting that he should accept the Presidency, he would let them have their way, and he promised to do his best to discharge the duties of the appointment with credit and reputation. (Applause.)

Vice-Presidents.—The retiring President is one *ex officio*. The two elected were Mr. J. W. Coe, proposed by Mr. Gibbings, and seconded by Mr. W. S. Carless; and Mr. F. J. Taylor, proposed by the President, and seconded by Mr. Gibbings.

Treasurer.—The Hon. Sec. moved that Mr. W. Carless, of Stafford, be elected. He said that even if Mr. Merrick's health had not broken down, it was his intention to resign the Treasurership this year. They would all very much regret Mr. Merrick's severance from that office, and as a worthy and capable successor he could think of no one better than Mr. W. Carless. (Applause.)

This was seconded by Mr. Blakeway, and very heartily agreed to, Mr. Carless briefly thanking the Association for the compliment paid to him.

Secretary.—Mr. Hunting said that in his new capacity as President-elect, he fully recognised the importance of having a good secretary. He therefore very cordially proposed the re-election of Mr. Dawes. (Applause).

The President, in seconding, said he would like to take that opportunity of thanking Mr. Dawes for the assistance he had rendered him during the past twelve months, and of testifying to his fitness for the post. It was no sinecure, he could assure them, and the painstaking manner in which Mr. Dawes carried out the onerous duties attached to the appointment was convincing proof of the deep interest he took in the welfare of the Association. (Applause).

The resolution was carried unanimously, and Mr. Dawes, in accepting the office, promised to do his best for the Association, as he had always striven to do in the past.

Auditors.—Upon the motion of the President, seconded by Mr. Gooch, Messrs. Blakeway and W. S. Carless were unanimously elected.

The Forthcoming Visit of the National to Buxton.

The Hon. Sec. said he had put the subject on the agenda, because the time was getting short. As most

The superficial layer supported by the fasciæ of the biceps shows a different direction of its fibres. For practical ends the bent position of the stifle is best.

The nervus peronæus lies (making its exit under the fleshy wall of the biceps) on the stretched extensor digitalis lateralis muscle, then it slants and crosses over to the fibula a finger breadth under the ligament. On this firm under layer ft is easy to find, and here it divides quite constantly into four branches.

At first either together or quite near one another the muscular branch for the extensor digitalis lateralis and the long superficial branch to the foot divide away. They lie on the middle of the fleshy bodies of the extensor lateralis, the superficial branch to the foot runs along this muscle and then crosses superficially over the bent surface of the hock to the metatarsus. After giving off these two branches, the nervus peronæus passes abruptly to the furrow between the lateral and common extensor of the phalanges, and divides immediately before it reaches it into two branches. The one, the upper runs obliquely in the muscular furrow and supplies the extensor digitalis communis and the tibialis anterior. The other is the deep foot branch of the peronæus, the object of search. This bends downwards and disappears also in the furrow between both extensor ligaments and runs down accompanied by the vena tibialis anterior. Above the upper annular ligament it sinks internally under the bent surface of the hock joint, and giving out two branches to the same comes, at the lower half of the tarsus, under the extensor tendon of the phalanges to appear again on the metatarsus.

If one makes a section of the deep phalangeal branch of the peronæus between both extensors, one has to draw these away from one another, as they cover the nerve which is accompanied by a large vein.

This has surgical disadvantages, and the fascia cruris parallel of the muscular furrow often has to be cut throngh. On this account it is better to operate nearer the stifle joint immediately under the slope of the nerve before it disappears in the furrow between the extensors. The nerve is undoubtedly easiest found here, and is to be seen immediately after cutting through the fascia. The sloping nerve trunk presents itself on the firm underlayer of the lateral extensors. An error as to the branches is impossible. In the middle of the lateral extensor a branch is given off which is the only important superficial one (the little branch arises near it in every case whether visible or not.)

The point of incision to find the nerve is surficial oblique to the axis of the leg (the stifle joint being bent almost at right angles). It will thus be parallel to the nerve trunks and be in the same direction as the fibres of the biceps muscle and of the deep strong layer of the fascia cruris (known as the aponeurosis of the biceps). The muscle stretch will not pull the edges of the incision in the fascia from one another, but draw them together. The nerve appears immediately after cutting through skin and fascia glimmering through the deep layer of the same; no vessels lie in its neighbourhood here.

If one goes down the bent stifle from the patella on the anterior surface of the stifle the tibial tuberosity is encountered. This bony protuberance has a certain length, and one can feel here its upper and lower end. If one feels from its under end right across the stifle obliquely, in its hollow, one comes across a little higher and towards the patella a ridge under the skin—the ligaments to the fibula. A finger's breadth under this ridge (towards the foot) lies the nervus peronæus, and here it is cut through.

Since the branches of the peronæus turn aside towards the foot the incision had better be some millimetres above than below in the nerve trunk. A finger's-breadth under the ridge answers the purpose in every case.—Ex. *Berliner Thierärzt. Woch.*

G. M.

ON THE ETIOLOGY OF CONTAGIOUS PLEURO-PNEUMONIA AND ANALOGOUS DISEASES OF THE HORSE. —By M. TARTAKOWSKY, St. Petersburgh.—(Abstract from a paper read at the Congress of Russian Veterinary Surgeons in January, 1904).

The question of the etiology of *pleuro-pneumonia* and of influenza of the horse, so rigorously discussed, became clearer since the publication of Lignières' labours in 1887, and (whose brilliant researches, says the author, seem to be a continuation and an extension of those of Babes and Starcovici), thanks to his complete knowledge of the bacteriology of the hæmorrhagic septicæmias, studied by him in the various anomats has contributed to efface the confusion.

He explains that, for pleuro-pneumonia and influenza, the principal *rôle* falls to the ovoid bacillus or cocco-bacillus of the group of hæmorrhagic septicæmias. It manifests the characters of its group and therefore it dispenses with giving the details of its dimensions, morphology, and virulence. The chief trait of Lignières' bacteria is that they are scarce or absent in the dead animal; this explains why Schütz did not encounter them. The cocco-bacillus does not secrete less toxins which put the organism into a state of receptivity for other microbes and notably the streptococcus of strangles. The diplo-coccus of pneumonia of Schütz, is not the agent of contagious pneumonia but only of a concomitant affection, as Hell had already demonstrated. Comparing the affections with those contained in Hueppe's hæmorrhagic septicæmia Lignières proposed to denominate them "Equine Pasteurellosis." The researches of Lignières have been scarcely followed; German literature is dumb on the subject; in France, Cadéac has thrown doubt upon the specificity of the cocco-bacillus; and, in Italy, Brusasco and Boschetti contest the conclusions of Lignières. Piano and Gallio-Valerio believe the pathogenic influence belongs to a bacillus of the *bacillus coli communis* group.

The results of the author's researches concerning the etiology of pleuro-pneumonia have led him to formulate the following fundamental rules:

1. The *contagious pleuro-pneumonia* of the horse is a specific malady of the group of hæmorrhagic

septicæmias. It absolutely corresponds to swine plague and more still to the septicæmia of the rabbit. In its most typical forms it is manifested under the aspect of pneumonia, pleuro-pneumonia, and simple pleuritis or complicated with pericarditis or simply with the character of *septicæmia*.

2. Hæmorrhagic septicæmia of the horse, but very rarely, in some isolated cases as during the course of epizootics, is complicated by secondary strangles infection. The indications of Babes and Starcovici, and Lignières upon these mixed infections are fully confirmed by the author's researches.

3. Schütz's study of pneumonia of the horse, which would seem to have received a direct confirmation from the researches of Lignières should be considered as an error.

4. Alongside of the contagious pleuro-pneumonia caused by the *cocco-bacillus* of hæmorrhagic septicæmia, isolated diseases and entire epizootics, the characters of which resemble those of the first infection, exist. Some take on the form of the pharnygo-laryngitis of Dieckerhoff and others arise from infection due to the streptococcus of strangles without participation of the cocco-bacillus of hæmorrhagic septicæmia.

5. Inoculation of mice with pure cultures of strangles streptococcus on the nasal mucus membrane and in the mouth may give rise either to typical strangles, or pneumonia and pleuro-pneumonia with general infection absolutely similar to that which is observed in the epizoötics of pleuro-pneumonia associated with streptococci in the horse.

6. From this fact infection by the nostril in mice may be recommended for the distinction of the strangles streptococcus.

7. Equine strangles may present itself not as a benign disease, but as an epizoötic difficult to combat. It may make itself noticeable by the great diversity of the localisations of the processus—streptococcic infections. It does not confer immunity. It shows varied extraordinary complications manifesting themselves sometimes after several months and even often following a mild attack." Affections of the joints and tendinous sheaths, iritis, iridochoroiditis, recalling to mind specific ophthalmia and cerebral abscess." During the course of some epizoötics the strangles streptococcus shows a surprising virulence. It may even produce serious affections and even death by reinforcement in the dependencies of the air passages.

8. An extensive use of sero-therapy may contribute to check strangles and its consequences, as well as prevent up to a certain point the recrudescence of epizoötics.

9. The single resource in the struggle against pleuro-pneumonia of the group of hæmorrhagic septicæmias may be in the application of a *specific* inoculation, prophylactic and curative, probably by the combined injections of cultures and serum.

10. In serious pleuro-pneumonic affections, the serum should be injected not under the skin, but into the pleuræ, trachea, or veins.

11. In the case of hæmorrhagic septicæmia complicating strangles, it might be necessary to use a *bivalent serum*.

12. The author criticises the denomination of *pasteurelloses*, proposed by Lignières, and which seems to him to be dictated by a chauvinistic sentiment. He would adhere to the appellation of *hæmorrhagic septicæmia* adopted by Hüppe in 1886 for this group of maladies. He has given several reasons to support this statements but it would be superfluous to reproduce them.

13. The etiological unity of influenza and contagious pleuro-pneumonia of the horse, established since 1889 by Babes and Starcovici, Calinescu, and during the last few years by the persevering work of Lignierès, is in all probability, if one admits the analogy of the different forms of disease produced by the cocco-bacillus in other species, viz., poultry, swine, rabbit, oxen, dog, and cat.

14. The French denomination of typhus or typhoid does not rest on any theoretical or practical basis.

15. Until more complete enlightenment, it is necessary to adopt the distinction proposed by Dieckerhoff and adopted now in the Russian Army and to distinguish :

(*a*) Influenza having a distinctive character of a mild humoral malady with disturbance of the nervous system, eye, tendinous sheaths, and intestine.

(*b*) Contagious pleuro-pneumonia (Chest epizoötic thoracic form of influenza, or Brustseuche of Diechierhoff.)

Concerning the *streptococcic infection*, it would be necessary to show the relationship to strangles by adding to the word strangles "*with complication*."

16. *Petechial fever* (purpura hæmorrhagica) does not exist in the horse as an independent disease, it is a complication.

17. To strangles should be relegated a special form of *pustular stomatitis* observed by the author.

H. G.

TRANSMISSION OF GLANDERS BY A RE-ACTING BUT APPARENTLY HEALTHY HORSE; RE-INFECTION OF TWO HORSES WHICH HAD CEASED TO REACT TO MALLEIN.—By M. A. CONTE, Chief of the Sanitary Service of the Département of Hérault.

Article 46 of the decree of 22 June, 1882, enacts that animals exposed to contagion "which have presented symptoms of the disease shall be under inspection of the veterinary authority for a year." The ministerial circular of September 15th, 1904, codifies the sanitary measures applicable to horses suspected, by cohabitation, which have reacted to the mallein test. Those which present no clinical symptom are subject (Art. 46) to inspection for a year "with permission to the owner to use them under certain restrictions" indicated by the consultative committee on epizootics in an Instruction for the use of mallein in doubtful cases, which states:—

"Animals which show the ordinary reaction (hyperthermie, œdema, prostration, etc.) are declared *suspects*; they must be rigourously isolated from the others, marked and kept under the supervision of the veterinary authority for a year . . . . injection with mallein will be repeated every two

months. . . . They will remain under surveillance until they shall have submitted to two successive injections without reacting; they may be used so long as they show no symptom which may be considered dangerous, but only on conditions that they shall not be watered at the common troughs nor allowed to enter any other stable than their own."

Theoretically perfect, this *régime* does not always give the expected results. In many cases on account of insufficient stable room horses are placed in a corner isolated only by bales from those which mallein has declared free from the disease. At first they are groomed with their special tools, fed and watered from vessels kept specially for their use and disinfected each time after use. Later these precautions are neglected. The owner, misled by the apparently healthy state of the animals, believes neither in the existence of danger nor in the indications of mallein, and considers the restrictions vexatious and useless. If the fear of the correctional tribunal prevents him placing the "reacters" in others stables or allowing them to drink from the common troughs, or using them under other conditions than those stipulated in the prefectoral "Order," he willingly neglects to take the measures demanded by common prudence in his own interest. In many cases this blind obstinacy has been followed by the onset of glanders in animals previously passed by the mallein test. Amongst others the following is worth noting for the lesson it teaches.

Glanders was found in a stable, and after the slaughter of several animals there remained five horses showing no clinical symptoms. Two of these passed the test with mallein, the other three were declared suspects. The two, isolated in a corner of the stable and afterwards removed to another, never reacted; those which reacted, used in a public service and working the same vehicle, lived in common and fed from the same manger.

The second testing, two months after, resulted in complete reaction in one of the three (hyperthermie, œdema, prostration, etc.), slight reaction only in the second, and none in the third. Contrary to the advice given him, the owner would not isolate these three separately. Forty-two days after the second injection the animal which had not reacted had nasal glanders. Autopsy showed recent sub-acute lesions in the pituitary membrane and the lungs, and an absence, in spite of the most careful searching, of old lesions.

At the third testing, the first reacter again reacted, his stable companion did not. Thirty-four days after the latter showed clinical symptoms and was slaughtered. Lesions, exclusively recent, existed in the nasal membrane and in the lungs.

The "reacter" remained under surveillance for four months longer, received injections each two months and reacted each time. Yielding at last to our solicitations the owner consented to slaughter. Autopsy showed old standing lesions of chronic glanders, with exceptional acerbations corresponding with the dates of destruction of the other animals. All the organs were free except the lungs, which were studded with hard, circumscribed nodules from the size of a pea to that of a walnut, consisting of a thick wall intimately connected with the pulmonary tissue, enclosing a caseous centre infiltrated with calcareous cells and of a yellowish white colour. The hypertrophied bronchial glands, hard and knotty, presented on section agglomerated tubercules which had undergone caseation.

This observation is interesting on several grounds. It shows in the first place the danger of reacting horses which are healthy in appearance. The two horses unaffected by the test were reinfected by their stable companion which was clinically free but which showed full reaction after each testing. This result entirely justifies the prudential measures recommended by Nocard from his earliest researches on the prophylaxis of glanders; it allows us to accept only with the greatest reservation the finding of the English Commission which was charged with the study of the transmission of glanders and the curative power of mallein, that "in *ordinary conditions*" the danger from horses healthy in appearance which react to mallein is so slight that it may be neglected.

The observation carries another lesson. It furnishes a fresh demonstration of the fact already known that a first attack of glanders does not confer immunity, nor does it increase the resistance of the dog (Galtier), or of the horse (Nocard). The two companions of this glandered horse gave on the first test a complete reaction, upon the second and third test they respectively ceased to react. This result appears to follow the lines of an experience reported in *Les Maladies Microbienne* (3rd ed., 1903, p. 235). "Nocard gave by ingestion a virulent culture to three horses from a badly infected stud which had several times given a complete reaction and then ceased to react. These three contracted the disease afresh as easily as the control."

Out of 16 reactors, apparently healthy, that we have been able to trace, three became glandered during the period of supervision, and 13 have shown no further symptoms. Cessation of reaction generally occurs after the third or fourth test, that is in from four to six months. From a sanitary and economic point of view, the regulations should prescribe the slaughter of all horses clinically free which have reacted to four successive tests at intervals of two months.—*Rev. Gén. de Méd. Vét.*

W. H. B.

MIDLAND COUNTIES VETERINARY MEDICAL ASSOCIATION.

The annual meeting was held at the Grand Hotel, Birmingham, on Friday afternoon, Feb. 10. The President (Mr. T. A. Huband, of Cheltenham) occupied the chair; and there were also present: Messrs. W. Hunting, F. W. Wragg, London; A. W. Mason, Leeds; A. Hodgkins, Hanley; J. A. Gold, Redditch; W. Carless, Stafford; F. J. Taylor, J. Malcolm, J. Blakeway, W. H. Brooke, J. Young, C. J. Byner, Birmingham; J. W. Coe, Stoke-on-Trent; F. L. Gooch, Stamford; L. W. Heelis, Solihull; T. Slipper, Tamworth; H. Collett, West Bromwich; W. S. Carless, Worcester; T. J. Brain, Cheltenham; F. W. Barling, Ross; J. J. Burchnall, Loughboro'; G. Wartnaby, Burton-on-Trent; H. L. Pemberton,

Bridgnorth; T. Chambers, Dudley; G. Prickett, Walsall; W. Grasby, Daventry; and the Hon. Sec. (Mr. H. J. Dawes, of West Bromwich). There was also present as a visitor Mr. D. R. Chalmers, Birmingham.

Apologies for unavoidable absence were received, either by letter or telegram, from: Profs. M'Fadyean, Dewar, and Pritchard; Messrs. R. C. Trigger, Marriott, Reynolds, Hughes, Cockburn, Potter-Carter, Wheatley, Over, Pritchard, Beddard, Fairer, Thackeray, Jermyn, Barrett, Marriott, A. Green, L. Green, Burndred, Tipper, Spencer, Packman, Carless (Hereford), Barber, Allen, and others.

Elections and Nominations.

The following gentlemen were elected members of the Association:

Mr. E. R. Holme Woodcock, of Eccleshall, proposed by Mr. W. Carless, and seconded by Mr. W. S. Carless.

Mr. J. G. Parr, of Leicester, proposed by the Hon. Sec., and seconded by Mr. Burchnall.

Mr. Taylor nominated for membership, Mr. D. Reid Chalmers, of Birmingham. Mr. Chalmers' name will be put to the vote at the next meeting.

Financial Report: Serious Illness of Mr. T. J. Merrick.

The Hon. Sec. said it was his painful duty to announce that he had received a letter from Miss Merrick stating that her father was seriously ill. He had a severe stroke of paralysis on January 3rd, and had been lying partially unconscious ever since. He (the speaker) went specially to Northampton and prepared a balance-sheet himself from Mr. Merrick's papers and books. That had since been duly audited, and he now submitted it.

Receipts.

	£	s.	d.
To Cash in hand, Jan. 1st, 1904	124	12	6
Subscriptions and Entrance Fees	54	11	0
Bank Interest (less charges)	2	2	11
	£181	6	5

Expenditure.

	£	s.	d.
By Victoria Vety. Benevolent Fund	5	5	0
Sanitary Institute	1	1	0
Institute of Public Health	1	1	0
Expenses of Delegate to San. Congress	5	5	0
" " P. H. "	5	5	0
Secretary's Account	18	16	3
Treasurer's "		14	6
Balance in Bank, December 31, 1904	143	18	8
	£181	6	5

He thought the amount in hand would give the members satisfaction. (Hear, hear.) There was one matter which Mr. Merrick intended to have brought forward, had he been able to be present, and that was with regard to members who were in arrear. In one or two cases he got no answer whatever to his application for their subscriptions which were three or four years old.

Mr. Gooch moved that the rule empowering the Treasurer to strike off the list of members the names of those who were more than three years in arrear be enforced. He suggested, however, that they should be written to once more and allowed a week in which to pay up.

This was seconded by Mr. Wartnaby and carried unanimously.

On the motion of Mr. Gooch, seconded by Mr. Gibbings, the balance-sheet was adopted.

Mr. Gibbings suggested that instead of hoarding up a balance, they should increase their subscription to the National Veterinary Benevolent Fund.

The President said that had been discussed at a recent meeting, and it was decided that there should be no immediate increase in the subscription, but that whenever the Association thought fit they would make a special donation.

Mr. Grasby then moved that a letter of condolence be sent to Mr. Merrick, with an assurance of their high esteem and regard for him. Mr. Merrick had worked hard for the profession, and until he was suddenly stricken with his present illness he was an exceedingly active man. There was no more popular member of the Association, and his services as Treasurer had been invaluable. (Hear, hear.)

The Hon. Sec. said he should like to second that motion. He regretted to state that under the most favourable conditions it would be months before he would be able to leave his bed.

After a few sympathetic words from the President, the resolution was carried unanimously.

Election of Officers.

On the motion of Mr. Blakeway, seconded by Mr. W. Carless, Mr. W. Hunting was unanimously elected President for the ensuing year.

Mr. Hunting said he had some diffidence in accepting the honour, greatly as he appreciated it, because as the National were visiting Buxton this year as the guests of the Midland, it might appear anomalous that the Secretary of the Society whose members were invited guests, should also be the President of the Society that was providing the hospitality. However, as it was the unanimous wish of the meeting that he should accept the Presidency, he would let them have their way, and he promised to do his best to discharge the duties of the appointment with credit and reputation. (Applause.)

Vice-Presidents.—The retiring President is one *ex officio*. The two elected were Mr. J. W. Coe, proposed by Mr. Gibbings, and seconded by Mr. W. S. Carless; and Mr. F. J. Taylor, proposed by the President, and seconded by Mr. Gibbings.

Treasurer.—The Hon. Sec. moved that Mr. W. Carless, of Stafford, be elected. He said that even if Mr. Merrick's health had not broken down, it was his intention to resign the Treasurership this year. They would all very much regret Mr. Merrick's severance from that office, and as a worthy and capable successor he could think of no one better than Mr. W. Carless. (Applause.)

This was seconded by Mr. Blakeway, and very heartily agreed to, Mr. Carless briefly thanking the Association for the compliment paid to him.

Secretary.—Mr. Hunting said that in his new capacity as President-elect, he fully recognised the importance of having a good secretary. He therefore very cordially proposed the re-election of Mr. Dawes. (Applause).

The President, in seconding, said he would like to take that opportunity of thanking Mr. Dawes for the assistance he had rendered him during the past twelve months, and of testifying to his fitness for the post. It was no sinecure, he could assure them, and the painstaking manner in which Mr. Dawes carried out the onerous duties attached to the appointment was convincing proof of the deep interest he took in the welfare of the Association. (Applause).

The resolution was carried unanimously, and Mr. Dawes, in accepting the office, promised to do his best for the Association, as he had always striven to do in the past.

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The Forthcoming Visit of the National to Buxton.

The Hon. Sec. said he had put the subject on the agenda, because the time was getting short. As most

plexy, seem to me to have made their pathological investigations fit in with their theories. Shortly, I may say that in my opinion the disease is in the udder. An animal, such as the Jersey or shorthorn, bred and used as a milking machine is the usual victim. It is probably confined for a week or two before calving; the udder becomes gorged—clogged in fact, and incapable of forming milk cells, and the blood in the udder ceases to be properly oxygenated. This produces a toxic condition of the whole system and naturally coma is the result. This is a very simple explanation, and may of course be open to adverse criticism, but if we consider the comparative success of the Schmidt treatment, I think it a fairly good one.

Symptoms.—The cow becomes uneasy, wild-looking about the eyes, paddles with the hind feet, soon losing power of the limbs. The secretion of milk is greatly decreased. Soon she falls down and although she may rise again, is very soon down again and prostrate. Bowels are generally confined, and the urine is suppressed. If treatment is not soon adopted she gets rapidly cold, falls over on her side with her head out and lower jaws on the ground, or the head twisted back on her side. Coma sets in rapidly, with glassy eyes and stertorous breathing. Death may supervene in a short time.

Treatment.—I know that speaking for myself, when a very young man I used to try all the different varieties of treatment then recommended, and with scant success. Bleeding, purging, the free use of stimulants, wet packing, etc.—they all had one termination—death. Any recoveries I got were, I think, not due to my treatment but rather in spite of it. Now this has changed. We can save a very large proportion of our cases, and sometimes even though we do not get them in the early stages.

When called to a case of milk fever I first of all see that the cow is, if down, lying on a clean bed, then thoroughly strip the teats and wash the udder well with hot water and soap and some antiseptic, using chinosol for this as a rule. Having boiled some water I dissolve ℥ij. potass. iodide in a quart of it, 10 grs. of iodine in it, and let it cool. When sufficiently cool I inject the four teats with an equal quantity, and after injecting the fluid inject plenty of air. Then I massage the udder well until the fluid is well distributed all over the gland. This I invariably do first and afterwards I turn my attention to the general condition of the patient. I see that she is placed in a natural position and made comfortable, placed on her sternum and packed up with bundles of straw. In some cases it is necessary to pass the catheter, and if the bowels are confined an injection of warm water and soap to the rectum may with advantage be given. If the head symptoms are severe and continue for an hour or two after the udder has been injected, I frequently give a tolerably big dose of chloral, and I must say I have seen very good results following this. In other cases the stomach and bowels may require a purgative, and when this is so I prefer aloes given in solution. Where the patient is very cold, with a weak pulse, and remains comatose, caffeine given subcutaneously is highly recommend by Schmidt and others, but I cannot speak from experience of its use as I have never tried it. Generally speaking, an hour or two after the foregoing treatment the patient seems brighter, holds up her head and looks about, may even begin to chew her cud and look as if she was taking some interest in her surroundings. This is a favourable sign and you may confidently predict a recovery. In other cases, however, another injection may be required, or at least we are told so, but personally I have never required to inject a second time. I remember in one case I had the cow was quite comatose, and I waited two hours with her. She began to look a bit brighter and I left, leaving a dose of chloral to be given if the head symptoms were well marked. Next day I saw her again and she was tossing her head about and was nearly as bad as before. I thought of giving a second injection, but instead I repeated the chloral, and next day she was up and all right, and a week after was sold at Darlington mart for £20.

I said at the beginning of my remarks that we could save about 80 per cent. of our cases by the Schmidt treatment, or modifications of the Schmidt treatment. I do not believe in sticking religiously to Schmidt's instructions, but have regard to the particular case and judge it from our own experience and knowledge. In saying 80 per cent. I think I am keeping well within the margin. Speaking for myself, I have done better than that. In cases where the treatment fails I think the failure is due to the fact that the owner of the cow has been doing some "doctoring" on his own account before calling us in. I find that cases so doctored are much longer in recovery, they are dosed with patent drenches, or have large quantities of whiskey poured down their throats. This makes them more stupid and comatose, and the injection does not seem to act so promptly.

Complications and sequelæ.—We may have a cow nicely recovering, and she suddenly gets worse, and when we examine her carefully we find she has pneumonia. These cases are generally fatal. She may have mechanical bronchitis set up by careless drenching on the part of the owner or his men, this is frequent when they give stimulants if she has partly lost the power of swallowing.

It is very aggravating to bring a cow through milk fever and then find that she cannot rise, she is paralysed in the hind extremities. With the old treatment we used to find this a very common condition, but I believe it is much rarer now. The best course in this case, if she is fit for the butcher, is to kill her at once, as successful treatment is rare and in any case very protracted.

Occasionally we find as a result of this treatment by injection that we have trouble in the mammary gland. This of course is very annoying, especially if an abscess forms and the cow loses the quarter. If we are very particular when injecting the udder in seeing that as far as possible we have aseptic conditions, we minimise very greatly the chances of this untoward result. I always boil the syphon of my syringe for five or ten minutes before using, and since adopting that I have not had any trouble with the udder afterwards. Another preventive measure is plenty of hand rubbing to the udder and continue it for a week after recovery, as I have had cases where the cow has milked well for two or three days, then one of the teats has gone wrong.

These various complications must be treated as they arise, and in bringing my remarks on milk fever to a finish let me just say a word as to the preventive treatment of this disease. If our clients asks us for advice on this matter we should advise them not to bring their cows to calving too fat, let them have plenty of outdoor exercise and look for their food there. Indeed it is recommended by some to calve them outside. This of course would not do in all weathers; we might not get milk fever but we would get something equally bad. With regard to medicinal agents as a preventive, I am strongly in favour of giving a cow about to calve, especially if a heavy milker and in plethoric condition, a good dose of Epsom salts. This I think exhausts the subject of prevention, and still, although there are so many preventive drinks on the market, we occasionally get a case. Our instructions to our clients in this event should be not to give any patent medicines, no whiskey or other stimulant, and above all no salts, but send straight for his veterinary surgeon, who will then have a fair chance of showing his skill.

Vomition in the Horse.

It is a recognised fact that vomiting in the horse is comparatively rare. The reason of this is because first

of all the horse is not particularly susceptible to nauseating influences; and secondly, and this is more important, the peculiar anatomical construction of the horse's stomach makes it nearly impossible. We can demonstrate this by introducing the nozzle end of a water pipe into the pyloric end of the stomach and let the stream of water completely fill it, and yet we find that not a drop will pass into the œsophagus. This of course, as you all know, is due to the folds of mucous membrane at the œsophageal opening, which act as a sort of valve. We therefore see that in health it is practically impossible for the horse to vomit. We find, however, in actual practice that a horse does occasionally vomit. What then is the cause?

When I was at College it was the opinion of most veterinary authorities that the act was induced by two conditions: (1) By dilatation of the œsophagus at its entrance to the stomach; (2) by rupture of the wall of the stomach itself.

With regard to dilatation of the œsophagus I can't say I have much practical experience, but can readily believe and understand that when this condition is present it will allow of the act taking place. Concerning the second, viz., rupture of the wall of the stomach, I am clearly of the opinion that it does *not* cause vomiting, and that in cases where we have vomiting and on post-mortem examination find rupture of the stomach, I think the rupture must have been subsequent to the vomiting and in all probability has been caused by the act. In practice I have had several cases of rupture of the stomach. The general condition of the animals indicated rupture, or at least some serious internal trouble —haggard expression, a weak, frequent, and *running down* pulse. No violent colicky pains, but more a sense of uneasiness and unrest; occasionally resting on the sternum and *no vomiting*.

On post-mortem I have found large rents in the stomach. If vomiting was a frequent result of this condition I should have expected to have seen it at least at some stage of the illness. But in no one case, where on post-mortem I found ruptured stomach, have I seen vomiting. Of course that is only my own experience, and probably some of you have had very different results in your practice, but for my own part it leads me to the conclusion that it is *impossible* for a horse to vomit after his stomach is ruptured, and the fact of a horse vomiting should be taken as a proof that the stomach is entire. I have frequently seen horses vomiting and on post-mortem I have found rupture of the colon, and quite recently I had a case of a mare which vomited freely and on post-mortem I found a rupture of the duodenum. In these cases of ruptured bowel where I had the opportunity of making a post-mortem I found the stomach and œsophagus perfectly healthy. What, then, was the actual exciting cause of the act of vomition? I cannot answer the question. I may, however, state that in some of the cases I had given a subcutaneous injection of eserine, which in all probability was the actual cause of the rupture.

We occasionally find that we are called to see a horse suffering from colic, and one of the symptoms is vomiting. With treatment we find our patient easily recovers. I well remember a case I had a few years ago in Glasgow. The subject was a cab horse, six years old. The history was that he had been working hard all day and at night was put into his stable tired and worn out. His manger was filled to overflowing with "chop," and being a greedy feeder he soon gorged himself. Shortly afterwards he was attacked with colic. I was summoned, and after giving him an ordinary gripe drink I waited with him some time. The special symptoms were that he rested on his sternum a good deal and looked very distressed, and after a little commenced to vomit, and continued to do so at intervals for two or three hours. I left him at an early hour in the morning after pronouncing his doom as a certain fact from a ruptured stomach. Coming into the stable at nine o'clock of the same morning I was surprised to find my patient up and apparently all right, looking for food. What, then, altered the condition or formation of this horse's stomach which enabled him to vomit? Not a rupture certainly, as he lived for years afterwards and never had another attack.

At Glasgow Veterinary College Prof. M'Call, in lecturing on diseases of the stomach, used to mention what was probably a unique case which had come under his observation, and which he called *Stricture of the stomach in the median line*. The subject of this case had periodic attacks of colic, vomiting easily when attacked. He was eventually killed and Prof. McCall examined the stomach and found there was a complete stricture. The stomach looked externally as if a ligature had been applied so as to divide it into two compartments, the line of division corresponding to the natural raphe. Internally the line of constriction corresponds to a hypertrophy of muscular tissue in an annular direction and is so complete as to divide the stomach into two compartments communicating with each other through an orifice six inches in circumference. The œsophagus in this morbid specimen instead of being narrower as it enters the stomach is wider than at any other part, and is funnel shaped. Prof. McCall had drawings of the stomach made and has very kindly lent them to me for to-day. For a description of the case I refer you to *The Veterinarian* for 1880, page 442. In this case it is easy to see how the horse could vomit, but while it is very interesting as being a peculiar and probably a unique case, it is not likely we shall come across a similar one, and it does not explain the phenomenon of vomiting.

To sum up my remarks then, I am of the opinion that the Act of vomition in horses may take place when there is a dilatation of the œsophagus at its entrance to the stomach; when the stomach is engorged with food and gases, and from rupture of the large or small bowel, never, however, do I consider it to be due to rupture of the stomach.

When called to a case where we find vomiting as a symptom we should not be in a hurry to pronounce an unfavourable prognosis, unless, indeed, we find the other symptoms indicate an early dissolution. Let us examine our patient carefully, and if we find any favourable symptom such as a good pulse, we can then expect a favourable issue.

Discussion.

The discussion was opened by Mr. Taylor, who said that milk fever seemed to be very prevalent in shorthorns but more so in Jersey cows. Schmidt's treatment no doubt is right, and it is much easier than the older method. He did not like Pot. iodid. but preferred Chinosol, which he injected with plenty of air, but did not filter it, and believed in having the udder well rubbed by hand. He often injected the udder twice, and found it answered very well. He did not believe in leaving medicine for the owner to give as they generally did harm and not infrequently choked the animal. He occasionally met with cases of paraplegia as a result. Vomition nearly always occurred in horses as a result of ruptured stomach. He was called to a colt with a running down pulse and ingesta coming down both nostrils. On post-mortem the stomach was ruptured.

Mr. Nash did not believe that milk fever was so common in shorthorns. He was of opinion that the cause of the disease was toxic, and advocated Schmidt's treatment, but substituted Chinosol for Pot. iodid. and the admission of as much air as possible, and with better results. He had seen a case of ruptured stomach which lived four hours after he was satisfied that rupture had taken place. Post-mortem examination ought to determine whether it was a rupture of any standing or not.

Mr. A. PEELE had used both Pot. iodid. and Chinosol injections into the udder in cases of milk fever, but thought the bad results mentioned ought to be put down to lack of strict antiseptic precautions. Had seen an animal get up after paralysis had supervened ten days afterwards. With the essayist he thought that vomition could not occur after the stomach was ruptured in a horse.

Mr. HILL thought the term milk fever a misnomer, as there is no fever present but a toxic condition. Had tried Chinosol instead of Pot. iodid., but was not so satisfied with it as with the latter agent, they usually rise in from three, four, or five hours to twelve. Best to leave no medicine for the owner to administer in such cases. He does not like chloral. He had mammary trouble in one case, but attributed it to lying on her udder and being very heavy. He once met with a mare which the owner informed him always vomited like a pig when she foaled.

Mr. RANKIN believed milk fever to be a toxæmia, and when injecting disinfectants into udder advocated the admission of air, as it extends the surface and caused a greater quantity of the agent to be absorbed. He found Chloral useful where there was delirium. He was under the impression that whether Chinosol, Pot. iodid. or Permanganate of potash were used they produced similar results. In cases of paralysis he thought strychnia should be tried early. In his opinion vomition does not necessarily take place with a ruptured stomach, but thinks the rupture occurs at that time or immediately after the act. One horse in his experience vomited severely before death, and on post-mortem no rupture could be found. Gangrene of lungs was cause of death, presumably from some of the ingesta dropping into the respiratory tract, and occurred four days later.

Mr. AWDE was of the essayist's opinion that vomition could only take place when the stomach was intact. He had met with several cases in which the horse vomited his food and recovered. He always regarded eructation of gases from the stomach to the mouth and the passage of food in the same direction as grave cases, but had known such recover, and had come to the conclusion that after rupture had taken place it was next to impossible for a horse to vomit.

In his opinion pure bred shorthorns seldom suffered from milk fever. Most cases seen in country cows in town dairies. He injected Chinosol and air, but could not obtain anything like the number of recoveries from that treatment which some practitioners credited it with. In country practice before this treatment was advocated it was possible to save a certain percentage. A great number recovered consciousness but paralysis remained, and that was his experience even with the present treatment.

Mr. H. PEELE believed in Schmidt's treatment for milk fever, but often attributed his want of success in such cases to drugs, etc., which had been given previous to his being called in. He believed in preventive measures being tried, and so far as he remembered nothing had been said about the cow suckling the calf.

As regards vomition he agreed with the essayist that the stomach must be entire when that act could be accomplished. He thought rupture took place through the violent muscular contraction of that organ in trying to get rid of its contents.

Mr. FORBES then replied and stated that in his opinion the breeds of cows most subject to milk fever were first, Jerseys; next, animals closely allied to the Shorthorn, and then Ayrshires. He had never tried Chinosol, but used Pot. iodid. entirely. In only two cases had he ever encountered any resulting mammitis, and since he adopted Schmidt's treatment he had met with no cases of paralysis. He believed that allowing the calf to suck the newly calved cow was a decided advantage as a preventive.

Mr. TAYLOR proposed a hearty vote of thank to the essayist for having brought the subjects forward for discussion; this was carried, and Mr. Forbes replied.

W. AWDE, *Hon. Sec.*

THE MEDICAL MAN AS EXPERT WITNESS.*

By W. B. RANSOM, M.A. Cantab., M.D. Lond., F.R.C.P. Lond.

That there are unscrupulous and venial men among us, as there are in all professions, is undoubtedly true, but of them here I take no note. We are, I believe, as a body neither better nor worse than other men of liberal education, and have a sense of honour at least as acute as the average citizen. And yet things are not right. We need not go so far as the well-known classification of the followers of Ananias into liars, damned liars, and expert witnesses, but it must have struck many as a curious fact that while in an ordinary consultation it is the rarest thing in the world for medical men to differ, in the witness box they never agree. In the drawing room, talking to the anxious friends of the patient upstairs, Dr. A indorses the diagnosis and delicately praises the treatment of his friend Dr. B, but in the county court he exposes to an indignant public the superficiality of his observations and the fallacies of his conclusions, insinuating at the same time the profound importance of his own vast experience. Dr. B naturally gives a Roland for an Oliver, and so the public are impressed with the accuracy of medical science and the impartiality of its exponents. The same pleasing spectacle is seen where we have a number of more or less eminent medical men on either side. To a certain extent there may be different testimony about matters of fact, but to a much greater degree the differences turn on the relative significance of observed facts, and in the absence of anything like mathematical exactitude in the present state of medicine there is here ample scope for the ingenuity of the witnesses. Thus a sarcoma is found in the abdomen of a man who alleges that he strained himself lifting a piece of coal. The medical men on the one side rake up all the cases in which a growth has followed an injury and suggest to the jury that nothing is more likely to occur, while those on the other pour scorn on the notion and discourse learnedly on cancer as a parasitic disease or a miscarried germ cell. Not long ago some distinguished and honourable medical men persuaded a jury that a man who died thin and pale succumbed to pernicious anæmia caused by an injury in the pit over two years previously. I venture to think that they would not have given that diagnosis or arrived at that etiology in an ordinary consultation in the patient's house. In another case of pain in the back the court was edified by the medical men on one side swearing to the existence of periostitis of the sacrum, which was flatly denied by their opponents. In those frequent cases of "railway" and "miners" spine the opposing confident diagnosis of organic and functional disease, or even malingering, can always be counted on to puzzle a jury. The action of a sick club which, being dissatisfied with the continued backache of one of their members, called in a veterinary surgeon and had him examined before them is more to be commended than going to law. "Why, man," said the veterinary surgeon, "you've got rinderpest; you'll have to be shot!" The man bolted home. "Fetch out my pit clothes," he said to his wife, and went to work the next day. The result of these scenes in court, of course, is that the medical evidence is more or less ignored and the judge and jury form their own opinion on other grounds. The labour and

A paper read before the Nottingham Medico-Chirurgical Society on Feb. 15th, 1905.

cost of collecting the so-called expert evidence are wasted, truth is not furthered, and an honourable profession is thrown into contempt.

Now what is the reason for this lamentable position in which men of at least average honour and intellect find themselves? The answer is that it arises from the predisposition and temperament with which each approaches the case. It is an obvious fact that it is not the intellectual powers which mainly decide what view a man will take of most problems, at least of those other than mathematical. Whither our guesses at truth will lead us depends on the temperament, The same facts were at the disposal of Cardinal Newman, Mr. Gladstone, and Mr. Herbert Spencer, and perhaps their intellectual powers were comparable. Yet the same facts led to three different conclusions in theology. The some anatomical and geological data led Huxley and Owen to flatly opposed views as to the evolution of man, and a common field of political observation does not make Mr. Arthur Balfour agree with Mr. John Morley. There must be some radical difference in temperament which leads them to draw such different conclusions from the same facts. What influences the temperament or excites the predisposition of the medical man asked to appear as an expert witness? It is his belief that he is in honour bound to do his best for the side that pays him. He looks upon himself as an advocate bound to work up the case from the one point of view, leaving the opposition to find the weak spots in his armour. He imagines himself a medical lawyer whose duty it is to defend his client. This is undoubtedly a code of honour but it is, I hold, a wrong code and one which has led to disastrous results. I venture to assert exactly the opposite, that the medical man, when consulted as a scientific witness, is not concerned as to which side wins, but has merely to testify to the exact facts and the conclusions logically deducible from them with as near an approach to mathematical accuracy and clearness as he can, and entirely without regard to the success or failure of the party who pays him. The scientific expert is not called in to judge the case or to exhibit human sympathy or the reverse; he should be merely an instrument of precision to exhibit the true state of affairs to judge and jury. The climax of absurdity is reached when each side permanently retains a medical man to fight its claims. The medical men in such a position are advocates, able and honourable advocates it is true, but cannot be looked upon as expert witnesses. That each side should have such expert advice is fair enough, but it should not come into court as an expounder to the laity of scientific truth.

The present methods of adjudicating these cases are in short fundamentally rotten, and stand self-condemned by the pitiful scenes that occur in our law courts and the general travesty of justice to which they lead. The system of Crown referees was intended to avoid this state of things, but for some mysterious reason judges have ignored their existence. Either their activity must be called into being or in some other way independent technical exponents of truth must be found, and the scientific expert witness no longer be mixed up with the medical advocate.—*The Lancet.*

DISEASES OF ANIMALS ACTS 1894 TO 1903. SUMMARY OF RETURNS.

Period.	Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Rabies. Cases Confirmed.		Sheep Scab.	Swine Fever.	
	Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Dogs.	Other	Out-breaks	Out-breaks.	Slaughtered *
GT. BRITAIN. Week ended Mar. 4	17	21	..	..	20	36	..	..	31	9	35
Corresponding week in 1904 ..	23	33	..	..	32	50	..	..	43	27	236
Corresponding week in 1903 ..	17	41	..	..	22	40	..	..	56	26	67
Corresponding week in 1902 ..	13	16	..	..	18	30	..	..	76	23	142
Total for 9 weeks, 1905	177	291	..	..	198	364	..	..	439	96	376
Corresponding period in 1904 ..	187	259	..	..	246	497	..	..	797	237	1458
Corresponding period in 1903 ..	148	238	..	..	198	378	..	..	851	248	1072
Corresponding period in 1902 ..	145	240	..	..	193	382	3	..	736	290	1713
IRELAND. Week ended Feb. 25	..	..	..	..	1	8	..	..	10	..	1
Corresponding Week in 1904 ..	..	..	..	..	..	..	..	..	17	2	35
Corresponding Week in 1903 ..	..	..	..	..	..	..	..	..	48	1	21
Corresponding Week in 1902 ..	..	..	..	..	..		..	..	26	2	36
Total for 8 weeks, 1905	..	..	..	..	6	12	..	..	146	4	187
Corresponding period in 1904 ..	..	..	..	..	2	9	..	..	224	18	429
Corresponding period in 1903 ..	..	..	..	..	1	2	..	..	246	5	250
Corresponding period in 1902 ..	..	..	..	..	3	6	..	..	241	23	419

Epizootic Lymphangitis, Week ending Jan. 14, 2 cases; Feb. 25, 2 cases.

Department of Agriculture and Technical Instruction for Ireland, (Castle Street), Dublin, Mar. 2, 1905.

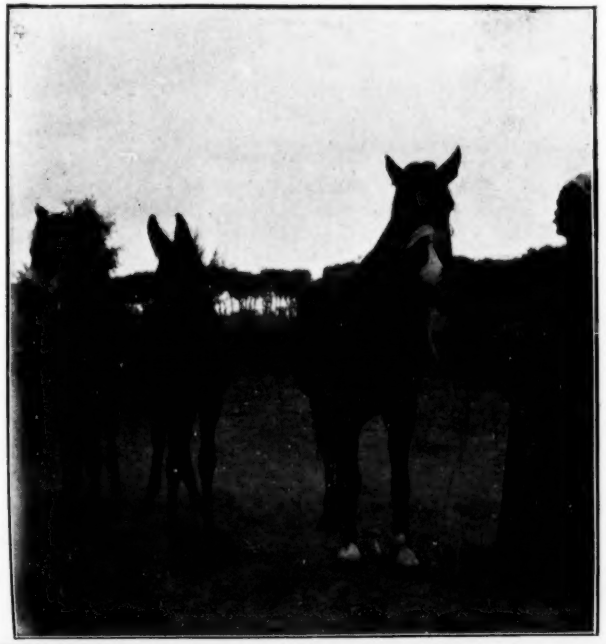
NOTE.—The figures for the Current Year are approximate only.

* As Diseased or Exposed to Infection.

Board of Agriculture and Fisheries, Mar. 7, 1905.

Sire, Egyptian Mule. Twin Foals, Pony: Mule. Dam, Spanish Mare.

Sire, Egyptian Mule. Twin Foals. Pony: Mule Dam. Spanish Mare.



plexy, seem to me to have made their pathological investigations fit in with their theories. Shortly, I may say that in my opinion the disease is in the udder. An animal, such as the Jersey or shorthorn, bred and used as a milking machine is the usual victim. It is probably confined for a week or two before calving; the udder becomes gorged—clogged in fact, and incapable of forming milk cells, and the blood in the udder ceases to be properly oxygenated. This produces a toxic condition of the whole system and naturally coma is the result. This is a very simple explanation, and may of course be open to adverse criticism, but if we consider the comparative success of the Schmidt treatment, I think it a fairly good one.

Symptoms.—The cow becomes uneasy, wild-looking about the eyes, paddles with the hind feet, soon losing power of the limbs. The secretion of milk is greatly decreased. Soon she falls down and although she may rise again, is very soon down again and prostrate. Bowels are generally confined, and the urine is suppressed. If treatment is not soon adopted she gets rapidly cold, falls over on her side with her head out and lower jaws on the ground, or the head twisted back on her side. Coma sets in rapidly, with glassy eyes and stertorous breathing. Death may supervene in a short time.

Treatment.—I know that speaking for myself, when a very young man I used to try all the different varieties of treatment then recommended, and with scant success. Bleeding, purging, the free use of stimulants, wet packing, etc.—they all had one termination—death. Any recoveries I got were, I think, not due to my treatment but rather in spite of it. Now this has changed. We can save a very large proportion of our cases, and sometimes even though we do not get them in the early stages.

When called to a case of milk fever I first of all see that the cow is, if down, lying on a clean bed, then thoroughly strip the teats and wash the udder well with hot water and soap and some antiseptic, using chinosol for this as a rule. Having boiled some water I dissolve ʒij. potass. iodide in a quart of it, 10 grs. of iodine in it, and let it cool. When sufficiently cool I inject the four teats with an equal quantity, and after injecting the fluid inject plenty of air. Then I massage the udder well until the fluid is well distributed all over the gland. This I invariably do first and afterwards I turn my attention to the general condition of the patient. I see that she is placed in a natural position and made comfortable, placed on her sternum and packed up with bundles of straw. In some cases it is necessary to pass the catheter, and if the bowels are confined an injection of warm water and soap to the rectum may with advantage be given. If the head symptoms are severe and continue for an hour or two after the udder has been injected, I frequently give a tolerably big dose of chloral, and I must say I have seen very good results following this. In other cases the stomach and bowels may require a purgative, and when this is so I prefer aloes given in solution. Where the patient is very cold, with a weak pulse, and remains comatose, caffeine given subcutaneously is highly recommend by Schmidt and others, but I cannot speak from experience of its use as I have never tried it. Generally speaking, an hour or two after the foregoing treatment the patient seems brighter, holds up her head and looks about, may even begin to chew her cud and look as if she was taking some interest in her surroundings. This is a favourable sign and you may confidently predict a recovery. In other cases, however, another injection may be required, or at least we are told so, but personally I have never required to inject a second time. I remember in one case I had the cow was quite comatose, and I waited two hours with her. She began to look a bit brighter and I left, leaving a dose of chloral to be given if the head symptoms were well marked. Next day I saw her again and she was tossing her head about and was nearly as bad as before. I thought of giving a second injection, but instead I repeated the chloral, and next day she was up and all right, and a week after was sold at Darlington mart for £20.

I said at the beginning of my remarks that we could save about 80 per cent. of our cases by the Schmidt treatment, or modifications of the Schmidt treatment. I do not believe in sticking religiously to Schmidt's instructions, but have regard to the particular case and judge it from our own experience and knowledge. In saying 80 per cent. I think I am keeping well within the margin. Speaking for myself, I have done better than that. In cases where the treatment fails I think the failure is due to the fact that the owner of the cow has been doing some "doctoring" on his own account before calling us in. I find that cases so doctored are much longer in recovery, they are dosed with patent drenches, or have large quantities of whiskey poured down their throats. This makes them more stupid and comatose, and the injection does not seem to act so promptly.

Complications and sequelæ.—We may have a cow nicely recovering, and she suddenly gets worse, and when we examine her carefully we find she has pneumonia. These cases are generally fatal. She may have mechanical bronchitis set up by careless drenching on the part of the owner or his men, this is frequent when they give stimulants if she has partly lost the power of swallowing.

It is very aggravating to bring a cow through milk fever and then find that she cannot rise, she is paralysed in the hind extremities. With the old treatment we used to find this a very common condition, but I believe it is much rarer now. The best course in this case, if she is fit for the butcher, is to kill her at once, as successful treatment is rare and in any case very protracted.

Occasionally we find as a result of this treatment by injection that we have trouble in the mammary gland. This of course is very annoying, especially if an abscess forms and the cow loses the quarter. If we are very particular when injecting the udder in seeing that as far as possible we have aseptic conditions, we minimise very greatly the chances of this untoward result. I always boil the syphon of my syringe for five or ten minutes before using, and since adopting that I have not had any trouble with the udder afterwards. Another preventive measure is plenty of hand rubbing to the udder and continue it for a week after recovery, as I have had cases where the cow has milked well for two or three days, then one of the teats has gone wrong.

These various complications must be treated as they arise, and in bringing my remarks on milk fever to a finish let me just say a word as to the preventive treatment of this disease. If our clients asks us for advice on this matter we should advise them not to bring their cows to calving too fat, let them have plenty of outdoor exercise and look for their food there. Indeed it is recommended by some to calve them outside. This of course would not do in all weathers; we might not get milk fever but we would get something equally bad. With regard to medicinal agents as a preventive, I am strongly in favour of giving a cow about to calve, especially if a heavy milker and in plethoric condition, a good dose of Epsom salts. This I think exhausts the subject of prevention, and still, although there are so many preventive drinks on the market, we occasionally get a case. Our instructions to our clients in this event should be not to give any patent medicines, no whiskey or other stimulant, and above all no salts, but send straight for his veterinary surgeon, who will then have a fair chance of showing his skill.

Vomition in the Horse.

It is a recognised fact that vomiting in the horse is comparatively rare. The reason of this is because first

of all the horse is not particularly susceptible to nauseating influences; and secondly, and this is more important, the peculiar anatomical construction of the horse's stomach makes it nearly impossible. We can demonstrate this by introducing the nozzle end of a water pipe into the pyloric end of the stomach and let the stream of water completely fill it, and yet we find that not a drop will pass into the œsophagus. This of course, as you all know, is due to the folds of mucous membrane at the œsophageal opening, which act as a sort of valve. We therefore see that in health it is practically impossible for the horse to vomit. We find, however, in actual practice that a horse does occasionally vomit. What then is the cause?

When I was at College it was the opinion of most veterinary authorities that the act was induced by two conditions: (1) By dilatation of the œsophagus at its entrance to the stomach; (2) by rupture of the wall of the stomach itself.

With regard to dilatation of the œsophagus I can't say I have much practical experience, but can readily believe and understand that when this condition is present it will allow of the act taking place. Concerning the second, viz., rupture of the wall of the stomach, I am clearly of the opinion that it does *not* cause vomiting, and that in cases where we have vomiting and on post-mortem examination find rupture of the stomach, I think the rupture must have been subsequent to the vomiting and in all probability has been caused by the act. In practice I have had several cases of rupture of the stomach. The general condition of the animals indicated rupture, or at least some serious internal trouble—haggard expression, a weak, frequent, and *running down* pulse. No violent colicky pains, but more a sense of uneasiness and unrest; occasionally resting on the sternum and *no vomiting*.

On post-mortem I have found large rents in the stomach. If vomiting was a frequent result of this condition I should have expected to have seen it at least at some stage of the illness. But in no one case, where on post-mortem I found ruptured stomach, have I seen vomiting. Of course that is only my own experience, and probably some of you have had very different results in your practice, but for my own part it leads me to the conclusion that it is *impossible* for a horse to vomit after his stomach is ruptured, and the fact of a horse vomiting should be taken as a proof that the stomach is entire. I have frequently seen horses vomiting and on post-mortem I have found rupture of the colon, and quite recently I had a case of a mare which vomited freely and on post-mortem I found a rupture of the duodenum. In these cases of ruptured bowel where I had the opportunity of making a post-mortem I found the stomach and œsophagus perfectly healthy. What, then, was the actual exciting cause of the act of vomition? I cannot answer the question. I may, however, state that in some of the cases I had given a subcutaneous injection of eserine, which in all probability was the actual cause of the rupture.

We occasionally find that we are called to see a horse suffering from colic, and one of the symptoms is vomiting. With treatment we find our patient easily recovers. I well remember a case I had a few years ago in Glasgow. The subject was a cab horse, six years old. The history was that he had been working hard all day and at night was put into his stable tired and worn out. His manger was filled to overflowing with "chop," and being a greedy feeder he soon gorged himself. Shortly afterwards he was attacked with colic. I was summoned, and after giving him an ordinary gripe drink I waited with him some time. The special symptoms were that he rested on his sternum a good deal and looked very distressed, and after a little commenced to vomit, and continued to do so at intervals for two or three hours. I left him at an early hour in the morning after pronouncing his doom as a certain fact from a ruptured stomach. Coming into the stable at nine o'clock of the same morning I was surprised to find my patient up and apparently all right, looking for food. What, then, altered the condition or formation of this horse's stomach which enabled him to vomit? Not a rupture certainly, as he lived for years afterwards and never had another attack.

At Glasgow Veterinary College Prof. M'Call, in lecturing on diseases of the stomach, used to mention what was probably a unique case which had come under his observation, and which he called *Stricture of the stomach in the median line*. The subject of this case had periodic attacks of colic, vomiting easily when attacked. He was eventually killed and Prof. McCall examined the stomach and found there was a complete stricture. The stomach looked externally as if a ligature had been applied so as to divide it into two compartments, the line of division corresponding to the natural raphe. Internally the line of constriction corresponds to a hypertrophy of muscular tissue in an annular direction and is so complete as to divide the stomach into two compartments communicating with each other through an orifice six inches in circumference. The œsophagus in this morbid specimen instead of being narrower as it enters the stomach is wider than at any other part, and is funnel shaped. Prof. McCall had drawings of the stomach made and has very kindly lent them to me for to-day. For a description of the case I refer you to *The Veterinarian* for 1880, page 442. In this case it is easy to see how the horse could vomit, but while it is very interesting as being a peculiar and probably a unique case, it is not likely we shall come across a similar one, and it does not explain the phenomenon of vomiting.

To sum up my remarks then, I am of the opinion that the Act of vomition in horses may take place when there is a dilatation of the œsophagus at its entrance to the stomach; when the stomach is engorged with food and gases, and from rupture of the large or small bowel, never, however, do I consider it to be due to rupture of the stomach.

When called to a case where we find vomiting as a symptom we should not be in a hurry to pronounce an unfavourable prognosis, unless, indeed, we find the other symptoms indicate an early dissolution. Let us examine our patient carefully, and if we find any favourable symptom such as a good pulse, we can then expect a favourable issue.

Discussion.

The discussion was opened by Mr. Taylor, who said that milk fever seemed to be very prevalent in shorthorns but more so in Jersey cows. Schmidt's treatment no doubt is right, and it is much easier than the older method. He did not like Pot. iodid. but preferred Chinosol, which he injected with plenty of air, but did not filter it, and believed in having the udder well rubbed by hand. He often injected the udder twice, and found it answered very well. He did not believe in leaving medicine for the owner to give as they generally did harm and not infrequently choked the animal. He occasionally met with cases of paraplegia as a result. Vomition nearly always occurred in horses as a result of ruptured stomach. He was called to a colt with a running down pulse and ingesta coming down both nostrils. On post-mortem the stomach was ruptured.

Mr. Nash did not believe that milk fever was so common in shorthorns. He was of opinion that the cause of the disease was toxic, and advocated Schmidt's treatment, but substituted Chinosol for Pot. iodid. and the admission of as much air as possible, and with better results. He had seen a case of ruptured stomach which lived four hours after he was satisfied that rupture had taken place. Post-mortem examination ought to determine whether it was a rupture of any standing or not.

Mr. A. PEELE had used both Pot. iodid. and Chinosol injections into the udder in cases of milk fever, but thought the bad results mentioned ought to be put down to lack of strict antiseptic precautions. Had seen an animal get up after paralysis had supervened ten days afterwards. With the essayist he thought that vomition could not occur after the stomach was ruptured in a horse.

Mr. HILL thought the term milk fever a misnomer, as there is no fever present but a toxic condition. Had tried Chinosol instead of Pot. iodid., but was not so satisfied with it as with the latter agent, they usually rise in from three, four, or five hours to twelve. Best to leave no medicine for the owner to administer in such cases. He does not like chloral. He had mammary trouble in one case, but attributed it to lying on her udder and being very heavy. He once met with a mare which the owner informed him always vomited like a pig when she foaled.

Mr. RANKIN believed milk fever to be a toxæmia, and when injecting disinfectants into udder advocated the admission of air, as it extends the surface and caused a greater quantity of the agent to be absorbed. He found Chloral useful where there was delirium. He was under the impression that whether Chinosol, Pot. iodid. or Permanganate of potash were used they produced similar results. In cases of paralysis he thought strychnia should be tried early. In his opinion vomition does not necessarily take place with a ruptured stomach, but thinks the rupture occurs at that time or immediately after the act. One horse in his experience vomited severely before death, and on post-mortem no rupture could be found. Gangrene of lungs was cause of death, presumably from some of the ingesta dropping into the respiratory tract, and occurred four days later.

Mr. AWDE was of the essayist's opinion that vomition could only take place when the stomach was intact. He had met with several cases in which the horse vomited his food and recovered. He always regarded eructation of gases from the stomach to the mouth and the passage of food in the same direction as grave cases, but had known such recover, and had come to the conclusion that after rupture had taken place it was next to impossible for a horse to vomit.

In his opinion pure bred shorthorns seldom suffered from milk fever. Most cases seen in country cows in town dairies. He injected Chinosol and air, but could not obtain anything like the number of recoveries from that treatment which some practitioners credited it with. In country practice before this treatment was advocated it was possible to save a certain percentage. A great number recovered consciousness but paralysis remained, and that was his experience even with the present treatment.

Mr. H. PEELE believed in Schmidt's treatment for milk fever, but often attributed his want of success in such cases to drugs, etc., which had been given previous to his being called in. He believed in preventive measures being tried, and so far as he remembered nothing had been said about the cow suckling the calf.

As regards vomition he agreed with the essayist that the stomach must be entire when that act could be accomplished. He thought rupture took place through the violent muscular contraction of that organ in trying to get rid of its contents.

Mr. FORBES then replied and stated that in his opinion the breeds of cows most subject to milk fever were first, Jerseys; next, animals closely allied to the Shorthorn, and then Ayrshires. He had never tried Chinosol, but used Pot. iodid. entirely. In only two cases had he ever encountered any resulting mammitis, and since he adopted Schmidt's treatment he had met with no cases of paralysis. He believed that allowing the calf to suck the newly calved cow was a decided advantage as a preventive.

Mr. TAYLOR proposed a hearty vote of thank to the essayist for having brought the subjects forward for discussion; this was carried, and Mr. Forbes replied.

W. AWDE, *Hon. Sec.*

THE MEDICAL MAN AS EXPERT WITNESS.*

By W. B. RANSOM, M.A. Cantab., M.D. Lond., F.R.C.P. Lond.

That there are unscrupulous and venial men among us, as there are in all professions, is undoubtedly true, but of them here I take no note. We are, I believe, as a body neither better nor worse than other men of liberal education, and have a sense of honour at least as acute as the average citizen. And yet things are not right. We need not go so far as the well-known classification of the followers of Ananias into liars, damned liars, and expert witnesses, but it must have struck many as a curious fact that while in an ordinary consultation it is the rarest thing in the world for medical men to differ, in the witness box they never agree. In the drawing room, talking to the anxious friends of the patient upstairs, Dr. A indorses the diagnosis and delicately praises the treatment of his friend Dr. B, but in the county court he exposes to an indignant public the superficiality of his observations and the fallacies of his conclusions, insinuating at the same time the profound importance of his own vast experience. Dr. B naturally gives a Roland for an Oliver, and so the public are impressed with the accuracy of medical science and the impartiality of its exponents. The same pleasing spectacle is seen where we have a number of more or less eminent medical men on either side. To a certain extent there may be different testimony about matters of fact, but to a much greater degree the differences turn on the relative significance of observed facts, and in the absence of anything like mathematical exactitude in the present state of medicine there is here ample scope for the ingenuity of the witnesses. Thus a sarcoma is found in the abdomen of a man who alleges that he strained himself lifting a piece of coal. The medical men on the one side rake up all the cases in which a growth has followed an injury and suggest to the jury that nothing is more likely to occur, while those on the other pour scorn on the notion and discourse learnedly on cancer as a parasitic disease or a miscarried germ cell. Not long ago some distinguished and honourable medical men persuaded a jury that a man who died thin and pale succumbed to pernicious anæmia caused by an injury in the pit over two years previously. I venture to think that they would not have given that diagnosis or arrived at that etiology in an ordinary consultation in the patient's house. In another case of pain in the back the court was edified by the medical men on one side swearing to the existence of periostitis of the sacrum, which was flatly denied by their opponents. In those frequent cases of "railway" and "miners" spine the opposing confident diagnosis of organic and functional disease, or even malingering, can always be counted on to puzzle a jury. The action of a sick club which, being dissatisfied with the continued backache of one of their members, called in a veterinary surgeon and had him examined before them is more to be commended than going to law. "Why, man," said the veterinary surgeon, "you've got rinderpest; you'll have to be shot!" The man bolted home. "Fetch out my pit clothes," he said to his wife, and went to work the next day. The result of these scenes in court, of course, is that the medical evidence is more or less ignored and the judge and jury form their own opinion on other grounds. The labour and

A paper read before the Nottingham Medico-Chirurgical Society on Feb. 15th, 1905.

cost of collecting the so-called expert evidence are wasted, truth is not furthered, and an honourable profession is thrown into contempt.

Now what is the reason for this lamentable position in which men of at least average honour and intellect find themselves? The answer is that it arises from the predisposition and temperament with which each approaches the case. It is an obvious fact that it is not the intellectual powers which mainly decide what view a man will take of most problems, at least of those other than mathematical. Whither our guesses at truth will lead us depends on the temperament, The same facts were at the disposal of Cardinal Newman, Mr. Gladstone, and Mr. Herbert Spencer, and perhaps their intellectual powers were comparable. Yet the same facts led to three different conclusions in theology. The some anatomical and geological data led Huxley and Owen to flatly opposed views as to the evolution of man, and a common field of political observation does not make Mr. Arthur Balfour agree with Mr. John Morley. There must be some radical difference in temperament which leads them to draw such different conclusions from the same facts. What influences the temperament or excites the predisposition of the medical man asked to appear as an expert witness? It is his belief that he is in honour bound to do his best for the side that pays him. He looks upon himself as an advocate bound to work up the case from the one point of view, leaving the opposition to find the weak spots in his armour. He imagines himself a medical lawyer whose duty it is to defend his client. This is undoubtedly a code of honour but it is, I hold, a wrong code and one which has led to disastrous results. I venture to assert exactly the opposite, that the medical man, when consulted as a scientific witness, is not concerned as to which side wins, but has merely to testify to the exact facts and the conclusions logically deducible from them with as near an approach to mathematical accuracy and clearness as he can, and entirely without regard to the success or failure of the party who pays him. The scientific expert is not called in to judge the case or to exhibit human sympathy or the reverse; he should be merely an instrument of precision to exhibit the true state of affairs to judge and jury. The climax of absurdity is reached when each side permanently retains a medical man to fight its claims. The medical men in such a position are advocates, able and honourable advocates it is true, but cannot be looked upon as expert witnesses. That each side should have such expert advice is fair enough, but it should not come into court as an expounder to the laity of scientific truth.

The present methods of adjudicating these cases are in short fundamentally rotten, and stand self-condemned by the pitiful scenes that occur in our law courts and the general travesty of justice to which they lead. The system of Crown referees was intended to avoid this state of things, but for some mysterious reason judges have ignored their existence. Either their activity must be called into being or in some other way independent technical exponents of truth must be found, and the scientific expert witness no longer be mixed up with the medical advocate.—*The Lancet.*

DISEASES OF ANIMALS ACTS 1894 TO 1903. SUMMARY OF RETURNS.

Period.		Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Rabies. Cases Confirmed.		Sheep Scab.	Swine Fever.	
		Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Out-breaks	Ani-mals.	Dogs.	Other	Out-breaks	Out-breaks.	Slaughtered *
GT. BRITAIN. Week ended Mar. 4		17	21	..	..	20	36	..	..	31	9	35
Corresponding week in	1904 ..	23	33	..	..	32	50	..	..	43	27	236
	1903 ..	17	41	..	..	22	40	..	..	56	26	67
	1902 ..	13	16	..	..	18	30	..	..	76	23	142
Total for 9 weeks, 1905		177	291	..	..	198	364	..	..	439	96	376
Corresponding period in	1904 ..	187	259	..	..	246	497	..	..	797	237	1458
	1903 ..	148	238	..	..	198	378	..	..	851	248	1072
	1902 ..	145	240	..	..	193	382	3	..	736	290	1713

Board of Agriculture and Fisheries, Mar. 7, 1905.

IRELAND. Week ended Feb. 25		..	..	..	..	1	8	..	..	10	..	1
Corresponding Week in	1904 ..	..	..	..	..	..	..	..	..	17	2	35
	1903 ..	..	..	..	..	..	..	..	..	48	1	21
	1902 ..	..	..	..	..	..		..	..	26	2	36
Total for 8 weeks, 1905		..	..	..	..	6	12	..	..	146	4	187
Corresponding period in	1904 ..	..	..	..	..	2	9	..	..	224	18	429
	1903 ..	..	..	..	..	1	2	..	..	246	5	250
	1902 ..	..	..	..	..	3	6	..	..	241	23	419

Epizootic Lymphangitis, Week ending Jan. 14, 2 cases; Feb. 25, 2 cases.

Department of Agriculture and Technical Instruction for Ireland, (Castle Street), Dublin, Mar. 2, 1905.

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection.

OYSTERS AND TYPHOID.

The Fishmongers' Company has published a preliminary report by Professor Klein, F.R.S., on certain investigations which he has undertaken for the Company in order to ascertain the vitality of the typhoid bacillus when introduced into shell-fish, and from which he has arrived at the following conclusions:—(1) Oysters readily take up into their interior the bacillus typhosus which has been introduced into their shell or into the surrounding sea-water. (2) Oysters, clean at starting, rapidly clear themselves of the ingested typhoid bacilli if they are kept in clean water which is frequently changed. (3) Oysters, clean at starting, clear themselves of the ingested bacilli to a less extent and slower if they are kept in a "dry" state—*i.e.*, out of the sea-water. (4) Oysters, from a polluted locality, clear themselves of the ingested bacilli to a less extent, and at a slower rate, even if kept in clean sea-water, than oysters clean at starting. (5) Oysters from a polluted locality retain the ingested typhoid bacilli to a markedly larger extent if kept "dry"—*i.e.*, outside the water. (6) The process of "clearing themselves" of the ingested typhoid bacilli cannot be owing to the oyster merely "passing out" these bacilli, but must be due to a large extent to an inherent power of the oyster of directly devitalizing the microbe. Experiments with the "dry" oysters prove this, and it is also evident from the rapid rate at which this microbe disappears from the oysters kept in clean water if compared with the very small number found at the same time in the surrounding sea-water. (7) Oysters which had been infected with typhoid bacilli, and were then kept in a "dry" state until they had practically cleared themselves, when subjected to re-infection with the bacilli appear to be less capable of dealing with them, even if kept in clean sea-water, than re-infected oysters which have always been kept in the water. This is explicable on the obvious supposition that oysters kept some days out of the water do not possess the same degree of activity and vitality in their tissues as those which have been kept under normal conditions. (8) Oysters from a polluted locality, containing a large number of the bacillus coli, very rapidly clear themselves of this microbe, whether kept in or out of the water. This shows that bacillus coli is foreign to the oyster and is rapidly destroyed by it. When, therefore, it is present in the oyster, it must have been derived from the surroundings. (9) However largely infected with typhoid bacilli, the oysters at no time present to the eye any sign of such infection; they remain in all parts of normal aspect. This is the case not only with the infected oysters kept in sea-water, but also with infected oysters kept in the "dry" state. There was only one exception, an oyster derived from a polluted locality, and which had been eleven days out of water. (10) During the time of the experiments (part of September, October, and part of November) the oysters lived quite well in sterile sea water frequently changed. Their was no noticeable alteration in their aspect; they remained plump and juicy, and capable of promptly and tightly closing their shells. (11) Cockles readily embody typhoid bacilli present in sea-water. Although the number at first appears to diminish in the body of the cockle, it soon increases to a considerable degree, for five days after cockles have been removed from polluted water to clean sand the number of typhoid bacilli in their bodies was threefold that originally present. Their subsequent diminution proceeded slowly, since a cockle examined ten days after removal from infected water still contained in its body 69,000 typhoid bacilli. (12) Mussels also readily embody the typhoid bacillus; in fact, analysis seems to show that they do so to a greater extent than oysters or cockles. As regards the fate of the typhoid bacilli in mussels, these appear to stand between oysters and cockles, since in mussels the bacilli undergo gradual diminution, which occurs incomparably more slowly than in oysters. but somewhat more quickly than in cockles.—*The Times.*

Complimentary Dinner to Prof. M'Fadyean.

At a dinner held at the Imperial Restaurant, Regent Street, on Wednesday, the 1st. inst., Prof. John M'Fadyean was entertained by some fifteen members of the recent post-graduate course at the Royal Veterinary College, London.

Mr. P. Scott Falshaw, Government Veterinary Surgeon to the Straits Settlements, stationed at Singapore, in whose hands the arrangements were admirably carried through, presided.

The Chairman gave the health of "His Majesty the King," whilst the toast of the evening was entrusted to Mr. F. A. Verney, F.R.C.V.S., District Veterinary Surgeon, Mooi River, Natal. In an excellent speech Mr. Verney referred to the pleasant and valuable associations engendered by the gathering together of men from different parts of their mighty Empire. He paid a high tribute to the quality of the instruction they had recently undergone, and spoke in eulogistic terms of the remarkable gifts of their guest in imparting knowledge, particularly emphasising the clearness and simplicity of language in which complex material of importance was presented for their mental assimilation. The knowledge acquired during the past ten weeks would, he felt sure, serve them well in the conduct of their profession in whatever part of the globe they happened to be located. Especially would the practice and methods they had acquired be of value to them in suggesting ideas for research and the possible elucidation of problems of disease yet unsolved.

The name of Mr. Dodd, the Professor's able assistant, was coupled with the toast.

Prof. M'Fadyean, in reply, thanked those present for their magnificent hospitality and for the hearty manner in which they had responded to the toast. He spoke of the gratification and pleasure as well as of the great encouragement it was to him, and those associated with him, to learn of the high appreciation of their efforts. In return he could say that without the interest which gentlemen had manifested in their work, and particularly of the remarkable assiduity exhibited by that particular class, his endeavours would be unavailing. The Professor concluded by an appeal to those in whose power it was to kindly forward "smears" or what not of obscure diseases peculiar to their respective countries. In that way he would be able from time to time to investigate, and it possible to demonstrate their nature to those who would follow his hearers in similar courses of study.

Mr. Dodd also suitably responded.

Glanders in Dublin.

As a consequence of the outbreak of glanders in the Rathmines district, six horses in one stable were, on Saturday, destroyed, and the stable in which the animals had been for some time previously, were burned. This action was taken owing to a resolution passed by the Dublin County Council, and the work was carried out successfully under the supervision of Mr. Richardson, chief veterinary inspector of the County Council. It should be mentioned that the officer has, under difficult circumstances, performed much useful work, and satisfactory progress is to be reported in connection with the stamping out of the disease in the county. The owners of the horses destroyed will, under the Act of 1893, be compensated in part or wholly for the loss of their animals.—*Irish Independent.*

Swine Fever.

Replying to Mr. Delany, Mr. Ailwyn Fellowes stated in the House of Commons that the Board of Agriculture were in frequent communication with the Irish Department of Agriculture prior to the passing of the recent Order dealing with the movement of Irish swine, and they gave the fullest consideration to the desire expressed by the Department that, if possible, the imposition of any restrictions on the movement of swine from Ireland into Great Britain should be avoided. The number of outbreaks which occurred in Great Britain and Ireland last year was 1196 and 182 respectively, but the figures are not in any way comparable, the definition of an outbreak differing materially in the two countries. The recent action of the Board was founded upon the fact that in Ireland no precautionary measures are taken against the movement of diseased swine or of swine which may have been exposed to infection, such as those which had been adopted with so much success in Great Britain. Experience has shown that the Board cannot consistently with safety against the introduction of disease accord more favourable treatment to Irish swine than is allowed in the case of pigs moved from one part of Great Britain to another.

Tuberculin Tolerance.

It is generally said that repeated injections of tuberculin produce a refractoriness to reaction, or tolerance, so that there is either no reaction or only a weak one, and in order to get another reaction it is necessary to let 25 to 30 days elapse.

Vallée has shown by a sufficient number of cases that this is not so, but that when a second injection is made 48 or 36 hours after the first the temperature rises two hours after the injection, not twelve as in the case of the first, and the continuance of the reaction is very short. The rise is 1·5° on the average, but anything between ·8 and 1·5° should be suspected. The second test is not reliable if tempe rature reaches 39°, and the patient should not be allowed to drink before testing.—*Rev. Gen. de Méd. Vet.*

Mallein Tolerance.

Galtier controverts the statement that repeated injections produce tolerance, and says that he has obtained repeated reactions at 15, 10, 5 days, and in one case he injected a horse on eleven different occasions in three months and obtained a reaction each time, and on post-mortem found glanders lesions old and new, but showing no tendency to heal; so he concludes that mallein is not tolerated and does not cure, and that newly bought horses should be malleinized as soon as ever their general condition allows.—*Journ. de Méd. Vét.*

Use of Coffee in Eversion of the Uterus.

Dr. Cayo S. Pajares finds coffee a valuable adjunct to treatment in cases of eversion, he gives it as ordinarily prepared in doses of 1 pint to 1 quart at intervals until the prostration is overcome, with very satisfactory results.—*Gac de Méd. Zool.*

The Serum Treatment of Anthrax.

Not for a number of years have so many cases of anthrax occurred within so short a time at Bradford. There have been five already this year, and three have been notified within ten days. Special interest attaches to the last two because both sufferers were taken to the Bradford Infirmary and were inoculated with serum. One of them died, but when he was admitted it was evident that the poison had spread, and the doctors could not locate the exact spot for inoculation. Dr. Logan says that it is too soon yet to pronounce a full opinion on the efficacy, or otherwise, of the treatment.—*Manchester Guardian.*

Personal.

BOYD—ROPER.—On March 1st at Christ Church, Wellington, by the Rev. Percy Gordon, M.A., W. J. Boyd, M.R.C.V.S., son of James Boyd, M.R.C.V.S., Clifton House, Ledbury, to Florence Evelyn, elder daughter of Alfred Roper, Kingsleigh, Wellington, Shropshire.

ARMY VETERINARY DEPARTMENT.

Extract from *London Gazette*,

WAR OFFICE, PALL MALL, March 7.

Capt. Frederick Charles Stratton to be Major.

OBITUARY.

JAMES DRUMMOND LAMBERT, C.B., F.R.C.V.S.,
Lt.-Col. A.V.D.
1855. Edin: Nov. 1866.

The death of Colonel Lambert on March 3rd, removes from the profession one who was, a short time since, among our most eminent and influential members. Unfortunately he has been a great invalid for the past two years, and we have lost the services of a man who was always earnest and willing in forwarding our professional interest. From *The Times* we take the following concise epitome of his life:

"Colonel James Drummond Lambert, C.B., a former Director-General of the Army Veterinary Department, died on Friday, at the age of 69, at Hopedene, Old Trafford, Manchester. Colonel Drummond-Lambert was the son of the late Mr. Septimus Lambert of Stretford, and was educated at Manchester Grammar School and, by permission of the Emperor Napolean III., at the Great Imperial Veterinary School at Alfort, in France. He entered the Army Veterinary Department in 1857, and was gazetted in 1863 to the 17th Lancers, a regiment in which he served 17 years. With the 17th Lancers he went through the Zulu campaign of 1879 and took part in the battle of Ulundi, his conduct in the operations receiving mention in dispatches. In the Transvaal campaign of 1881 he was principal veterinary officer, and in 1890 he was appointed head of the Army Veterinary Department. He continued to discharge the duties of this position until June 27, 1897, his tenure having been specially extended for two years in recognition of the zeal and ability with which he conducted the affairs of the Department. For many years a constant frequenter of the Army and Navy and Naval and Military Clubs, of which he was a member, Colonel Drummond-Lambert was greatly respected. An able administrator and a man of sound professional knowledge, he did much to advance the interests of the service, and when he retired it was to the regret of all with whom he had been associated at headquarters. Colonel Drummond-Lambert received the Companionship of the Bath in 1891, in which year also he was elected president of the Royal College of Veterinary Surgeons. At the time of his death he was a governor of the Royal Veterinary College."

To this we need add little. Our last Charter was obtained during his presidentship, and those who remember with what assiduity it was opposed by a small section, also know how the tact and influence of Colonel Lambert assured success. As a member of our Council he was always in favour of any movement calculated to raise the status of the profession. No man was more thoroughly appreciative of the necessity of a higher

standard of general education as a factor in increasing the social position of the M.R.C.V.S.

As an individual Colonel Lambert was a genial representative of the old regimental officer. Proud of the Service, and of his profession, he was punctilious in everything embraced in the words "an officer and a gentleman." To that standard he was never false, and his example and influence contributed largely to the position now held by the Army veterinary officer.

The Colonel was unmarried, but he leaves relatives in the profession to mourn his loss. He was brother to Mr. Tom Lambert of Dublin, and brother-in-law to Mr. Alex Lawson, of Manchester.

GEORGE BOURDASS, M.R.C.V.S., Hunmanby.
Graduated, Lond: April, 1864.

Mr. Bourdass died on Thurday, March 2nd, at his residence at Denmark House, Hunmanby, in his 79th year. He resided for many years at Bridlington, and subsequently at Hunmanby, but his practice as a veterinary surgeon extended far beyond the immediate locality. For many years he was an Inspector under the Privy Council for the purposes of the Contagious Diseases (Animal) Acts, and he took a very active part in stamping out the cattle plague (rinderpest) in the East Riding in the 'sixties.

He was, however, better known as an owner and breeder of hackney horses. He owned the world-famed Denmark, and the almost equally celebrated Danegelt, which he purchased when a yearling, and sold 13 years later to Sir Walter Gilbey, for £5,000, probably the largest price ever paid for a hackney horse. Mr. Bourdass was associated with the formation of the Hackney Society, and he was for many years an honoured member of the Council of that Society. Although quiet and unassuming, he was a man of great force of character, and was thoroughly respected by all who knew him. His opinion was highly valued by the Agricultural world.—*Yorkshire Post.*

JOSEPH CARLISLE, M.R.C.V.S., Carlisle.
Lond: April, 1837.

On Friday evening, March 3rd, Mr. Joseph Carlisle, who in a double sense was the "grand old man" of the veterinary profession, died at his residence, The Thorn, Tarraby. He was the first Cumbrian who graduated at the Royal Veterinary College, and the oldest M.R.C.V.S. in England. He was also a member of the Veterinary Medical Association, and the first President of the Border Counties' Veterinary Medical Association, in whose proceedings he always took a great interest. He had been able to take a rational interest in everything going on about him till Thursday evening when he had a seizure. He then became unconscious, and in twenty-four hours afterwards passed quietly away.

Mr. Carlisle was born in September, 1808, and was therefore in his 97th year. He was born at Haltcliffe, and belonged to one of the oldest families in the Caldbeck district, who were noted for their longevity. His grandfather died in his 85th year, and his father, John Carlisle, died in his 90th year. His family lived in and owned the house now licensed and known as the Horse and Farrier Inn at Haltcliffe, and it was there that Joseph first saw the light. He received the rudiments of education at the old school at Howbeck, which has long been in ruins. Opposite the school was a Quakers' Meeting House where, as he long afterwards vividly recollected, there were large gatherings of Friends, who drove to the place during the summer months, gatherings which he lived to see dwindle into small proportions and finally cease to be held. In his younger days he often hunted with John Peel. He alse knew John Woodcock Graves, and saw his famous song, "D'ye ken John Peel," in manuscript. He remembered having heard his father read to a number of people at Hesket-new-Market a description of the duel fought by the Duke of Wellington and Canning. The Rector of Caldbeck, who married him, was the father of Mrs. Lynn-Linton, the novelist, and the bride and other ladies rode to church on palfreys, with pillions.

His diploma dated 24th April, 1837, was signed by Sir Astley Cooper, Sir Richard Bright, Joseph Henry Green, John Ayrton Paris, Professor Coleman, and Professor Sewell. He travelled to London by coach. On one occasion when going over Doncaster Heath he saw from the top of the vehicle the St. Leger run for; and on another occasion when travelling by the Staffordshire route a stoppage was made at Stone to change horses just as a great prize fight was being brought to a termination. When he first went to London he stayed at the famous Saracen's Head. He was in the Metropolis when Queen Victoria was crowned, and saw the procession from High Holborn.

Mr. Carlisle first started business at Wigton. At that time there were only about six veterinary surgeons in the County of Cumberland. Coming to Carlisle a few years afterwards, that is about sixty years ago, he purchased the veterinary business carried on by Mr. W. A. Wilson in an establishment which occupied the site of the present Bowling Green Hotel. He opened a chemist and druggist's shop in premises in Scotch Street directly opposite to what is now the entrance to the Public Markets. After carrying on the business of veterinary surgeon and a shoeing forge for several years he took the Royal Hotel yard and started a posting business. He extended this, and for the purpose rented and occupied the Coffee House yard and stables. In addition to the posting business he introduced the running of omnibuses to and from the railway station. He had six of these vehicles in use at one time. After Mr. John Lawson started his one cab on the streets Mr. Carlisle boldly followed suit, and put a number of cabs on the streets. Mr. John Bell, V.S., was an assistant to Mr. Carlisle while the posting business was being carried on, and the partnership between the two as veterinaries, which has lasted for over half a century and up to the time of Mr. Carlisle's death, began after Mr. Bell had returned from College.

Some time after Mr. Carlisle and Mr Bell had entered into partnership, Mr. Carlisle took Monkhill Hall farm, and after remaining there for some years he removed to Tarraby. While a farmer Mr. Carlisle kept a good stock of cattle and was a successful breeder of horses, many of which he sent to York, Lincoln, and Newcastle fairs and sold for good prices. He was often engaged as judge at agricultural shows, and for many years he judged the light horses at the East Cumberland agricultural show on the Castle green, as well as at various other shows in Cumberland and Westmorland. Mr. Carlisle was a fine operator, and as an anatomist, and especially in his knowledge of a horse's foot, he had few equals in his day. He was also a frequent contributor in his younger days to *The Veterinary Journal.*

During the time of the cattle plague the farmers were so much pleased with Mr. Carlisle's exertions on their behalf that they presented him with a handsome testimonial; and at a later period the members of the veterinary profession and other friends and admirers presented him with a life-size oil painting and portrait of himself by the late Mr. Benjamin Scott. The oil painting is now hanging in the Council room of the Royal College of Veterinary Surgeons in Red Lion Square, to whom Mr. Carlisle made a gift of it.—*The Carlisle Courier.*

A. CUNNINGHAM HOWATT, M.R.C.V.S., Pollockshaws.
Glas: May, 1894.

Mr. Howatt's death occured on Friday, Feb. 17, at the age of 35.

FRANCIS EDWARD KNOTT, M.R.C.V.S.,
High Street, Portsmouth.
Lond: Dec., 1863.

The death of Mr. F. E. Knott occurred at his residence, High Street, on Friday, March 3rd. Though he had been in indifferent health for some time his death was not anticipated by his friends, and his demise was somewhat of a shock to them; a severe attack of influenza was the cause of this sudden termination. Mr. Knott, amongst other appointments, held that of V.S. to the Corporation, and he was justly proud of the fine stud. On the occasion of the Volunteer review at Portsmouth at Easter, 1882, the guns of of the Middlesex (Vol.) Artillery were drawn by the Corporation horses; the arrangements were made by Mr. Knott, and he was warmly complimented by Lord Truro, who had command of the Forces and who offered him the post of Veterinary Surgeon in the Field, a post he held for 15 years, retiring with the rank of Captain and permission to wear the uniform. For many years he had held the appointment of V.S. to the R.S.P.C.A. Mr. Knott was unmarried, he was generally esteemed throughout a large circle of friends and acquaintances, and was a a brother of Dr. Charles Knott, of Southsea. He was a member of the "United Brothers" Lodge of Freemasons. The funeral took place at the Highland Road Cemetery, at Eastney, on the 6th inst. There was a large gathering, which included Dr. C. Knott, brother; Mr. Councillor M. Gill, representing the Portsmouth Corporation; Mr. A. T. Prickett, Chief Constable; Messrs. J. W. Bowton and J. Collins, who had been associated with the deceased in the Directorate of the Arts Club; and a number of others, officials of the town and the various public concerns with which the deceased had been associated. Many beautiful wreaths were sent by relatives and friends.

SAMUEL NEWMAN, M.R.C.V.S., Southsea, Hants.
Lond: Dec., 1866,

Mr. Newman deceased on Friday, March 2nd. His age was 77 years.

ROBERT SCOTT, M.R.C.V.S., Kelso, N.B.

The death occurred on Tuesday morning, 28th ult., of Mr. Robert Scott, a leading Border farmer, tenant of Spylaw Farm, near Kelso. Mr. Scott, who was in his seventy-ninth year, was the last of a family of brothers distinguished for many years in Border agricultural circles. A qualified veterinary surgeon and a Member of the Royal College of Veterinary Surgeons, he preferred farming, and entered on the tenancy of the large farm of Philiphaugh, near Selkirk, whence he came to the equally important holding of Spylaw. Some months ago he met with an accident in Kelso, and had never properly rallied from the effects.—*Weekly Scotsman.*

CHAMBERS.—On the 1st inst. the dearly beloved wife of T. Chambers, M.R.C.V.S., J.P., of Dudley, aged 43.

DEIGHTON.—On Friday, March 3rd, at 33 Gowthorpe, Selby, Jane, wife of Philip Deighton, M.R.C.V.S., aged 53 years. Interred at Skipwith on Sunday, March 5.

CORRESPONDENCE.

SAD CASE.

Dear Sir,

Will you kindly allow me to notice a letter signed "W. A. Byrne" which appeared in your last issue. It is a comment on my appeal on behalf of Mr. A. G. Leaney, M.R.C.V.S. The letter apparently means to convey that I have deliberately sat down and exaggerated a case in order to press its consideration on a charitable public. Such an idea was far from my intention, as, indeed, I have greatly understated the melancholy circumstance of the case.

Mr. Leaney met with an accident in the discharge of his duty whilst acting as *L. T.* for Mr. W. A. Byrne. This occurred on Nov. 1st, 1904. He was removed to the County Infirmary, which is just opposite my Rectory gate here, on Nov. 11th, 1904, in a state of "complete powerlessness" and there he lies now. He received salary up to the latter date, together with his fare from Scotland. He has received none since. These are the plain facts. I have visited him regularly, at least three times a week, since his admission to hospital, Mr. W. A. Byrne last saw him on Christmas Day, 1904. Mr. Leaney's present distress, and in the prospect of a more distressful future, was it not natural that I, *at his own request*, should make the appeal that I have done? which appeal I now repeat! He is a member of our English Church and a communicant. I am his clergyman, with the care of him whilst in my parish, hoping to save him from actual want when he is away from this which a little timely effort can avert. What is to become of his wife? What is to feed, clothe, and educate his children. I consider it a case of very real sadness and one which the profession shall not be deaf to. We do not aim at realising a fortune by this appeal, but will you allow your bowels of compassion to be closed because one member of your noble society puts a peculiar construction on the matter? Although I am "*outside* the veterinary profession" I am *inside* the Christian pale! I only know Mr. W. A. Byrne by appearance, in fact I am at a loss to know what he means by his letter.

I have never once heard Mr. Leaney or his wife speak in any terms but of the highest of the resident surgeon of the Infirmary or of any of the officials. I invite the closest and most minute investigation of this case, and I now redouble my earnestness in appealing to the kindness and generosity of the veterinary profession *all over the world* for contributions for poor Leaney, a brother in religion and a brother in Masonry.—I am, yours faithfully,

KEOGH KEMPSTON (Rector.)

The Rectory, Roscommon, March 6.

P.S.—I shall acknowledge all further contributions as I have done.

Dear Sir,

Kindly allow me on behalf of my husband, A. G. Leaney, to express regret at the manner in which Mr. Byrne misconstrued the letter sent to *The Record* by the Rev. Keogh Kempston. That gentleman had no intention of casting reproach on the generosity or good nature of Mr. Byrne. As a matter of fact Mr. Byrne was most kind to us after the accident (incurred on Nov. 1st, on return railway journey whilst on professional duty) and kept our two boys in his home for several weeks, also paying Mr. Leaney's salary until Nov. 11th.

The real object of Mr. Kempston's letter was to obtain the means (pending doctor's certificate of removal) to place and maintain Mr. Leaney in a convalescent home for some months to give him every chance of regaining health and strength. It was a painful surprise to me to learn from Mr. Byrne's letter that there was no hope of my husband's ultimate recovery, the doctor not having expressed such an opinion to me.

It is quite true that we have the means to leave Ireland when we require to do so, but we have no income to support an invalid husband, myself, and two boys for any length of time. Surely such a small matter as a single fare to England or Scotland would not be the object of an appeal to the members of the profession.

A few minutes conversation or a letter written to my husband would have explained matters more satisfactorily, and undoubtedly caused less pain to the feelings of a helpless man.—I am, sir, yours obediently,

C. LEANEY.

The Infirmary, Roscommon.
March 6.

COMMUNICATIONS AND PAPERS RECEIVED.—Messrs. H. L. Roberts, J. Clarkson, H. P. Standley, C. Leaney, S. Dodd, W. Summers, Keogh Kempston, J. Smith, Cordingley & Co. Major J. A. Meredith. G. M. "Subscriber."

The Yorkshire Post, The Weekly Scotsman, The Manchester Guardian.